

Part I: Policy Choices

Chapter 2: Policy Decisions in Designing a Student Loan Programme

A policy maker who favours the idea of student loans, but is still at the stage of designing a loan programme, faces a number of policy decisions. First and foremost, there are political decisions:

What is the aim of the loan programme? Student loans may be introduced as a way of increasing opportunities for access to higher education, by providing subsidies, or as a way of generating extra resources for higher education by increasing cost recovery.

The objectives of student aid programmes should be clear and explicit. It will be impossible to monitor the effectiveness of student loans or grants unless the objectives of the programme are stated clearly and explicitly. It is also important to avoid confusion between the objectives of a system of financial aid for students and other social objectives. Some developing countries, for example Nigeria, require all graduates to undertake a period of national service after graduation; and some students regard this as the means by which they repay their debt to society, and therefore may see it as an alternative to student loans. However, a system of national service usually has quite different objectives from a system of financial aid for students: national service frequently involves some form of military training, or is intended to promote national unity. Such objectives should not be confused with questions about how higher education should be subsidised.

The goals of the loan programme must be clarified at the outset. The aims of the loan programme will be partly determined by the choices already made regarding fees:

What is the policy on fees? Do universities and other institutions charge fees for tuition and for accommodation and food? The scope of any student aid programme will depend on whether students are expected to pay fees in public universities and colleges, whether private institutions are permitted, and whether financial aid is made available to students in both the public and private sector.

Once the political choices have been made and the overall objectives of a loan programme are established, the policy maker must choose between various options in the design of a loan programme. These choices can be summarized in terms of ten practical decisions that have to be made:

1. *What form of financial aid will be provided for students?* Will all aid be provided as a loan, or will grants, scholarships or other forms of aid also be available? What will be the relationship between student loans and other forms of aid?

2. *Who will administer the loan programme?* Will it be the responsibility of banks, or of universities and colleges, or will a new agency such as a state-owned student loan fund be established?

3. *Who will be eligible for loans?* What criteria will be used to select eligible students?

4. *What proportion of students will receive loans?*

5. *What size of loan will be provided?* What will be the average and maximum annual loan, and total borrowing limit?

6. *What will be the repayment terms for student loans?* What will be the interest rate and the length of repayment?

7. *How much burden of debt should students be allowed to accumulate?* Will provisions be made to ensure that students do not face excessive debt burdens, or to reduce the burden of debt in particular circumstances?

8. *How will loan repayments be collected?* What measures are necessary to keep default to a minimum?

9. *Will the loan programme incorporate incentives?* Will favourable loan terms be granted as a reward to students who achieve high grades, or to influence student behaviour and choice?

10. *How flexible will the loan programme be?* Will there be special provisions for particular categories of student, e.g. married women, or those who study abroad? Can mechanisms be developed so that the loan programme can adapt to new conditions?

This chapter examines each of these policy choices in turn.

1. *What form of financial aid will be provided for students?*

In a few countries some students or their parents are expected to pay the full cost of higher education, for example if they attend private universities. However in every country some forms of financial aid are provided by government or by private agencies. These include:

(a) *Grants, Scholarships or Bursaries* provided by government, and which may awarded:

- * to all students, regardless of their individual circumstances (e.g. the 'student stipends' provided in many African countries)
- * on the basis of financial need (e.g. the means-tested grants provided to university students in Britain)
- * on the basis of academic merit (e.g. competitive scholarships offered in several countries)
- * on the basis of *both* financial need *and* academic merit.

(b) *Bonded Scholarships or Bursaries* which in some countries are provided by governments for students in particular fields, such as teacher training, medicine, or engineering. Such scholarships are primarily regarded as a form of graduate recruitment, rather than financial aid for students, and in France such bonded scholarships, which are offered on a small scale by some government departments, are in fact called 'pre-salaries.'

- (c) *Sponsorship by Public or Private Employers* which, like bonded scholarships, is regarded in many countries as a form of graduate recruitment for shortage occupations, particularly engineering.
- (d) *Private (non-government) Scholarships, Grants or Bursaries* offered by charitable foundations in many countries.
- (e) *Subsidised Services for Students* which may include low-cost housing or subsidised meals, and cheap travel, provided in many countries.
- (f) *Subsidised Job Opportunities for Students* which are offered in some private universities and occasionally by governments (e.g. the federal government College Work-Study Program, in the USA, which offers low-income students the chance to work part-time in campus-based jobs in college libraries, refectories etc.).
- (g) *Tax Concessions for Private Educational Expenditure* which allow students or their parents to offset fees against tax liabilities, (e.g. Tuition Tax Credits, which have been introduced in Canada and proposed in the USA).
- (h) *Vouchers* which have been proposed in some countries as a way of helping students or their parents to pay school or university fees.
- (i) *Subsidised Student Loans* which may offer varying degrees of interest subsidy, long repayment periods and in some cases, 'loan forgiveness clauses', which mean that students may have part of their debt cancelled in certain circumstances.
- (j) *Unsubsidised Student Loans* which may be offered by commercial banks at market interest rates, to either students or their parents to enable them to finance higher education. In some cases these are backed by a Government guarantee (e.g. the Parent Loans for Undergraduate Students (PLUS) Program in the USA).

Given the wide range of options for combining grants, loans, and other forms of financial aid, the debate that is waging in some countries, couched in terms of 'loans versus grants' is misconceived. Instead, the policy maker should consider alternative combinations of grants, loans, interest subsidies and other forms of financial aid, and choose the most cost-effective combination, taking into account:

- (a) the *objectives* of student aid policy: is priority to be given to rewarding academic merit, to satisfying manpower goals, or to achieving equality of opportunity by removing financial obstacles?
- (b) the relative *costs* of different forms of financial aid, including both direct expenditure, administrative costs and 'hidden costs', such as the costs of subsidising loans or the costs of defaults.

If financial aid is provided in the form of a loan which must be repaid, rather than in the form of a grant or scholarship, the final cost to the government will be lower, and for a given outlay more students can receive financial aid. When public funds are scarce it is likely to be more efficient, therefore, to provide financial aid in the form of a mixture of grants and loans than to rely only on grants.

The extent of the saving to public funds will depend on the terms of the loan. Most loan programmes involve some form of subsidy, in the form of low interest rates, long repayment periods and cancellation of debt for certain categories of students. This means that all subsidised loans, particularly those that are interest-free, such as the loans recently introduced in the Federal Republic of Germany, involve a substantial 'hidden grant' (see boxes on pages 30 and 31).

The Cost of Alternative Combinations of Loans and Grants

Student aid in Canada is provided through a mixture of loans, subsidised and guaranteed by the Federal Government (the Canada Student Loan Program, CSLP), grants financed by provincial governments, and loans subsidised and guaranteed by provincial governments. Total government expenditure in 1979-80 was Canadian \$280 million, which was distributed between grants and loans in a ratio of 60:40 and provided grants for 20% and loans for 30% of all full-time students.

A Federal-Provincial Task Force on Student Assistance in Canada in 1981 estimated that to continue to allocate the student aid budget in the ratio of 60% grants, 40% loans would cost \$400 million in 1981-82. To change to an all-grants programme would cost an additional \$290 million but to change to an all-loans programme would save \$185 million.

The Task Force therefore concluded: "For a budget of a given size there was a direct relationship between the proportions of loans in the program and the number of students who could be assisted. Conversely, the same number of students could be aided at less cost to governments in programs that contain more loans than in programs that contain more grants." (Canada Task Force 1981, p. 137).

The 'Hidden Grant' in some Student Loans

If loans are offered to students at a very low rate of interest, or even interest-free, the real value of the loan repayments will be worth less than the amount borrowed, because of the difference between the subsidised (or zero) interest and market rates of interest.

If the government offers students loans at 4%, but the market rate of interest is 10%, then the government is sacrificing 6% interest. If the student loan is repaid over a 10 year period, as in the USA, or even over 20 years as in Germany and Sweden, then the government will lose 6% interest each year and the cumulative value of student loan repayments is considerably lower than the value of loan repayments at a market rate of interest of 10%.

This loss to the government is, of course, a gain to the student, who would otherwise have to pay 10% interest. The monetary effect is the same as if the student had been given a loan, at a full market rate of interest, plus a grant. A recent research study by Johnstone (1986) uses this type of calculation to estimate the gains to the student borrower and the losses to the government involved in the subsidised loan programmes in the Federal Republic of Germany, Sweden and the USA. The student's gain is described as a 'hidden grant'. This hidden grant is much less in the USA, where students with Guaranteed Student Loans (GSL) have to pay 8% interest and repay within 10 years than in Germany, where the loan is free of interest and repaid over 20 years. In fact if we compare the discounted present value of loan repayments at the subsidised interest rate and a market interest (ie. discount) rate of 10%, then an American student with a GSL actually repays only \$750 of every \$1,000 borrowed, which is equivalent to receiving an unsubsidised loan of \$750 and a \$250 grant. Similarly, if we assume a discount rate of 10% a Swedish student in effect receives a 50% grant and 50% unsubsidised loan, and a German student a 78% grant and only 22% loan. If we assume a higher discount rate, then the hidden grant is even larger. The detailed calculation is shown on the next page, with alternative discount rates of 10% and 12%.

Present Value of Repayments on 1,000 Units of Initial Lending, United States, Sweden, and Federal Republic of Germany, Assuming 1.5 Years In-School, and Using Discount Rates of 8, 10, and 12 Percent

	United States	Sweden	Federal Republic Germany
Repayment period	10 years	(a)	20 years
In-school assumption	1.5 years	1.5 years	1.5 years
Grace period	0.5 years	2.0 years	5.0 years
Interest during in-school	0 percent	4.2 percent	0 percent
Interest during grace			
period	0 percent	4.2 percent	0 percent
Interest during			
repayment	8 percent	4.2 percent	0 percent
Original loan	\$1,000	1,000 Skr	DM1,000
Period from origination			
to repayment (in-school			
plus grace)	2 years	3.5 years	6.5 years
Debt at start of			
repayment	\$1,000	1,155 Skr	DM1,000
Mode of repayment	equal quarterly	graduated	equal quarterly
		annual	
Amount each payment	40 @ \$36.56	(b)	80 @ DM12.50
Present value of			
repayments at 10%			
discount rate	\$753.25	471.90 Skr	DM226.62
Hidden grant at			
10% discount rate	\$246.75	528.10 Skr	DM773.38
Present value of			
repayments at 12%			
discount rate	\$667.11	380.46 Skr	DM175.05
Hidden grant at 12%			
discount rate	\$332.89	619.54 Skr	DM824.95

^aThe repayment period in Sweden is normally the number of years between the initiation of repayment and age 51; a 20-year repayment period is most often used for illustration.

^bThe first annual payment on the Swedish debt of 1,155 Skr would be 57.76 Skr, which payment would increase each year for 20 years at a 4.2 percent annual rate of increase, and which repayment stream would amortize the starting debt at an annual interest rate of 4.2 percent.

Source: Adapted from Johnstone (1986) p. 170.

Finally, the choice between alternative types of aid must also take account of political, administrative and other factors which may determine the *feasibility* of alternative options.

The actual combination of loans, scholarships and grants should also take account of such factors as:

- * methods of determining eligibility
- * the costs of administration
- * loan repayment terms
- * the expected level of default.

All these factors will be discussed in the remainder of this chapter.

2. Who will administer the loan programme?

Any government establishing a loan programme with government guarantees, interest subsidies or direct provision of loans will need to set up a planning committee, including representatives of:

- * The Central Planning Ministry (if such exists)
- * The Finance Ministry
- * The Central Bank
- * The Ministry of Education
- * Universities, Colleges or other relevant institutions.

This planning committee is likely to have overall responsibility for designing the loan programme. Before deciding on the terms of loans to be offered, it will be necessary to decide who will be responsible for the following four administrative functions:

(a) Selection of loan recipients

Who will be responsible for processing loan applications, administering means tests or applying other criteria, and selecting the students who will receive loans?

(b) Providing loans

Who will distribute loan funds to students?

(c) Guaranteeing the loans

What form of guarantee will be provided or required? Some programmes require a personal guarantee from a parent or

other responsible adult. In most countries the government provides the ultimate guarantee that the loan will be repaid in cases of death or default by the borrower, but in some countries there is also an intermediate guarantee agency.

(d) *Securing repayment of loans*

Who will be responsible for collecting loan repayments, and for pursuing defaulters?

Day-to-day responsibility for administering the loan programme may be given to:

- * a government agency set up for the purpose, such as the Central Study Assistance Committee in Sweden, the Joint Committee on Student Finance (JCSF) in Hong Kong, and the Students' Loan Bureau in Jamaica,
- * a quasi-government agency, such as the Japan Scholarship Foundation,
- * a government agency with other financial responsibilities, such as the Pakistan Banking Council, which administers student loans in Pakistan,
- * a state-owned commercial bank, such as the People's Bank in Sri Lanka, or the Bank Negara Indonesia, which administers loans in Indonesia,
- * private commercial banks, which administer the Guaranteed Student Loan Program (GSLP) in the USA, and the Canada Student Loans Plan,
- * universities, colleges and other education institutions, which administer the National Direct Student Loan Program (NDSLPL) in the USA, or
- * student welfare organisations, such as 'studentwerke' in the Federal Republic of Germany.

Some programmes divide responsibility for the different administrative functions between different agencies. For example, universities or colleges may be given responsibility for selection, and commercial banks may actually provide the loans and collect repayments. The justification for this is that commercial banks

may have considerable expertise in the management of loans and collection of repayments, but little knowledge of the education system; while University teachers may be well equipped to make academic judgements, but less experienced in judging financial need, and not at all experienced in administering and controlling loans.

The choice of administrative model may depend partly on the banking and educational structures of the country. For example the USA has an enormous range of banking and credit institutions, public and private universities and colleges, private proprietary schools offering vocational courses, and a considerable degree of student mobility and credit awareness in the population. In these conditions a single centralised system would be impossible. In fact the USA does not have a single loan system but a complex combination of loan programmes with day-to-day administration being shared between student loan administrators in 3,000 universities and colleges, who select loan recipients; 20,000 banks, savings and loan associations and credit unions, which actually provide student loans; state guarantee agencies, set up by the state legislatures to provide loan guarantees; and a secondary market for student loans, the Student Loan Marketing Association (SLMA, or Sallie Mae as it is colloquially called). In other words student loans are big business in the USA, and highly profitable for the banks, because the federal government and state guarantee agencies provide a variety of interest subsidies and guarantees against default. Similarly in Canada, where every province has its own student loan programme, in addition to the Canada Student Loan Programme, private banks provide loans, backed by Government guarantee.

Such a system involves substantial administrative costs, but it also means that the capital for student loans is provided by private investors, rather than the government. This reduces the financial burden on the public purse. The government does not finance student loans directly, but meets the costs of guaranteeing the loans against default and subsidising borrowers and lenders. In the USA students borrowed over \$9 billion in 1985-6, but the total cost to the Federal Government was only one third of this, at \$3.2 billion. Thus every dollar spent by the federal government generated \$2 in private capital for student loans.

In developing countries, which do not have the vast network of

private banking and financial institutions of Canada or the USA, special agencies may have to be established. Alternatively responsibility for providing loans may be given to a state-owned bank. The choice between setting up a specialised agency or using state-owned or commercial banks, will depend on:

- * the structure of financial institutions in the country, their responsibilities, coverage and location, and experience in administering loan programmes
- * the relative costs of setting up a new agency or using existing financial institutions
- * the special requirements of external agencies such as international development banks, which may be involved in financing a student loan programme, and may wish to establish special procedures for ensuring adequate financial control and monitoring.

Countries such as Jamaica and Barbados, which established student loan programmes with the help of loans from the Inter-American Development Bank (IDB), have chosen to set up specialised agencies: the Students' Loan Bureau in Jamaica and the Student Revolving Loan Fund in Barbados (see box on p. 36). It was judged that existing financial institutions, such as commercial banks, did not have the capacity or expertise to select student loan recipients, administer the loans, and monitor the effectiveness of the loan programme. Specialised agencies were therefore set up, with close links with the Ministry of Education, the central bank and with educational institutions, and these agencies were given responsibilities for selecting loan recipients, determining the financial and other conditions of the loans, determining the size of loans offered to students, and day-to-day administration of the loan programme, including collecting data and maintaining records to allow regular monitoring.

In other countries it may be cheaper and more effective to give responsibility for day-to-day administration to commercial banks which already operate other types of loan programme. For example, in Indonesia, responsibility for the student loan programme, Kredit Mahasiswa Indonesia (KMI) was given to the largest state-owned commercial bank, Bank Negara Indonesia

Student Loan Agencies in Jamaica and Barbados

In Jamaica the Students' Loan Bureau was set up in 1970, with initial capital provided by the Bank of Jamaica, partly financed by a loan from the Inter-American Development Bank (IDB) and partly by counterpart funding from the Government of Jamaica. Since it was established, the Students' Loan Bureau has awarded over 12,000 loans. The Student Revolving Loan Fund (SRLF) was set up in Barbados in 1976, also financed through a loan from IDB. Both are specialised agencies, with responsibility for day-to-day administration of student loans on the basis of terms agreed with the government, which provides guarantees against default and also subsidises the interest on student loans.

More details of the SRLF in Barbados, including a description of its administrative structure, are given in a case study in Chapter 4.

(BNI), which already had responsibility for other government credit programmes such as loans for industry and agriculture. BNI already had considerable experience of managing loan programmes, but no knowledge of how to select the most 'deserving students'. Responsibility for selecting loan recipients was therefore delegated to the Rectors of individual universities. This helps to reduce the direct costs of administering student loans, but at the expense of increased administrative burdens for universities.

In fact many countries rely heavily on the staff of universities and other institutions to process loan applications and select loan recipients. This may impose substantial additional work on academic or administrative staff, and in some cases universities employ special staff to administer student aid. This represents a 'hidden cost' of many student loan programmes. Even if no additional staff are employed there is an 'opportunity cost' if university staff are required to spend their time administering loan programmes instead of teaching or administering higher education programmes. Whether or not university staff are involved in the

day-to-day administration of student loans, by selecting loan recipients, experience in many countries suggests that their co-operation is vital for the success of the loan programme.

Decisions about who will process loan applications and select the students who will receive loans have an important influence on the direct cost of administering student loan programmes. Experience shows that these costs vary considerably. In the USA it is estimated that the annual cost of servicing each Guaranteed Student Loan is between 1.5 and 2% of the loan, and in Sweden, the annual costs of administration are about 1.8% of the total student aid budget. In Hong Kong, the direct cost to the JCSF of administering loans is 2.2% of their total expenditure, but the total costs of administration are probably nearer 4%. In Jamaica, on the other hand, 10% of the total budget was earmarked for administrative expenses when the Students' Loan Bureau was first set up. But this represented the cost of setting up the administrative machinery for the loan programme, rather than the regular cost of administering an established programme.

The annual cost of administering a loan programme will depend on:

- (a) the size of the programme, which determines whether economies of scale are possible;
- (b) the complexity of the regulations; and
- (c) who selects borrowers.

If the loan programme relies on university staff to select, as in Indonesia, the direct costs of processing applications fall on the institutions, rather than on the loan agency, as in Hong Kong. But, as emphasised above, this hidden cost should still be taken into account. In choosing between alternative administrative models, the policy maker must take account of all the likely costs and also the efficiency of alternative options, which will depend on the capacities of existing institutions.

A further choice has to be made about what form of guarantee will be provided for the loans. The options are:

- * borrowers must provide personal guarantees eg. a relative who will be personally responsible for the loan in cases of default, as in Hong Kong;
- * the government guarantees against default or non-repayment of the loan due to the illness or death of the borrower;
- * the loans are insured with a government-backed insurance agency, as in Indonesia; or
- * the loans are guaranteed by specially established guarantee agencies, for example the guarantee agencies set up by the state governments in the USA (see boxes below and on p. 39).

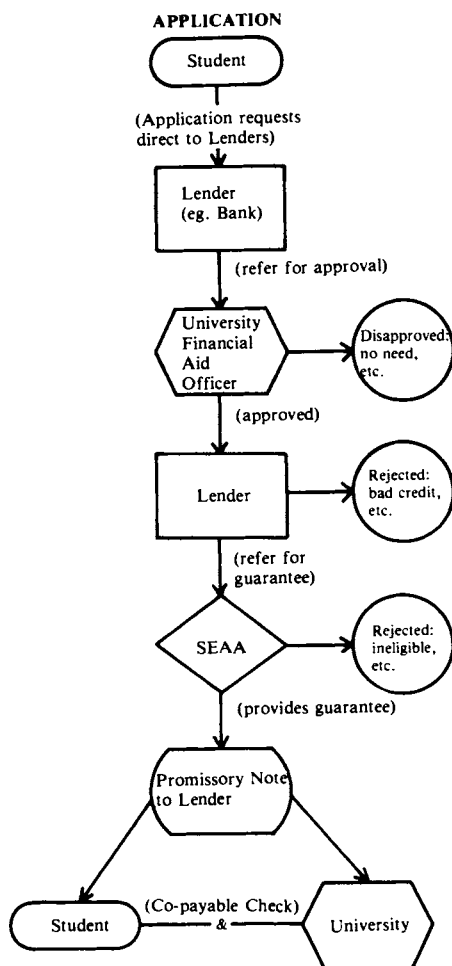
State Guarantee Agencies for Student Loans in the USA

Many states in the USA have set up their own agencies to administer and guarantee student loans. For example the State of Virginia has established a State Education Assistance Authority (SEAA), which aims to make private capital available for low-cost long-term educational loans and to ensure that they are administered as efficiently as possible. In 1985 the Agency guaranteed nearly 50,000 GSLP loans, and was responsible for 293,000 loans outstanding. The agency monitors the banks providing the loans, tries to ensure that collection procedures are efficient and that defaults are kept to a minimum, and meets the cost of default claims if the borrower is unable to repay the loan. The cumulative default rate on all SEAA guaranteed loans over the last 25 years has been 5.7%, which compares well with default rates in many other states of the USA.

A simplified diagram of the steps involved in the processing of a loan application by the lender (usually a bank), the university and the SEAA is shown on the next page.

Operations and Processing of Loans by the State Education Assistance Agency (SEAA) of the State of Virginia, USA

The borrower's completion of an application for the GSL or PLUS loan is the first of several steps. The borrower initially obtains an application from a participating lender. The format of the application guides the borrower through the necessary steps for approval by the school, the lender and the SEAA. In summary, these steps are as follows:



The choice between alternative arrangements for guaranteeing student loans will depend partly on whether a government-backed insurance agency already exists to provide other forms of loan guarantee. The government provides the ultimate guarantee against default in all subsidised loan programmes, so that the simplest option for most developing countries is for the government to guarantee student loans directly. On the other hand, several countries require borrowers to provide their own personal guarantees, even though this may discourage students from the poorest families.

3. *Who is eligible for loans?*

One of the first decisions, when designing a student loan programme, is whether it should be:

- (a) available to all students who wish to borrow, or
- (b) selective, and confined to particular categories of student.

If the loans are subsidised, then (b) is preferable on grounds of cost-effectiveness.

If the scheme is selective, the basis of selecting recipients may be:

- * academic merit,
- * financial need,
- * a combination of both merit and need,
- * type or subject of study, or
- * institution.

In some countries scholarships are awarded on the basis of academic merit, and loans are provided on the basis of financial need. However, most loan programmes involve some element of subsidy, either by means of interest subsidy, or cancellation of debt in certain circumstances. At a time of increasing pressure on public funds most countries are therefore obliged to ration subsidised loans, and make both loans and scholarships dependent on financial need.

In the USA, where different interest rates apply to different loan programmes, a strict means test is now applied to determine

eligibility for subsidised loans. During the 1970s the means test was relaxed as a result of the Middle Income Student Assistance Act (MISAA), which made the Guaranteed Student Loan Programme (GSLP) available to all students, regardless of parental income. This caused a huge increase in the number of borrowers, and the costs to the federal government of subsidising loans rose from US\$437 million in 1975 to \$2,425 in 1981. This illustrates the danger of making a loans programme 'open-ended', with little attempt to make eligibility selective. The escalating costs of the GSLP in the 1970's caused serious concern, and since 1981 a means test has once again determined eligibility for GSLP loans.

An alternative approach is to give loans only to students who satisfy stringent academic criteria. For example in Indonesia, university students are eligible for loans only when they have already completed satisfactorily about 75% of their courses. This reduces the risk that the student may drop out before completing the course, but it also means that students must already have overcome considerable financial and academic hurdles in order to qualify for a loan.

The choice between alternative eligibility criteria may sometimes involve a conflict between efficiency and equity objectives. For example, in several programmes loans are given only to students in public universities, on the ground that the quality of private universities is variable and inferior to public universities, and that those who can afford private education do not need financial aid. This decision to opt for a selective loan programme helps to keep down the costs of the student loan programme. The alternative option of an 'open-ended' programme would involve considerably higher expenditure.

On the other hand, if access to subsidised loans is confined to a privileged group of students who already enjoy other forms of subsidy, it raises questions of equity. In most countries, students in public universities already enjoy subsidised tuition so that if these students also receive subsidised loans they will enjoy a double advantage, compared to students in private universities, who must finance tuition fees as well as living expenses. Moreover, students in private universities are not necessarily wealthy. In Indonesia, for example, a recent survey showed that students in public and private universities had very similar family income levels. However,

students in public universities pay substantially lower fees than students in private universities, and are eligible for student loans, whereas students in private universities, not only pay higher fees, but are not eligible for loans. Thus, on grounds of equity it would be preferable to make access to loans dependent on financial need rather than on type of institution. However a programme based entirely on financial need may have higher drop-out rates than a programme confined to academically strong students. Thus it might be regarded as more equitable but less efficient than a programme based on academic criteria.

In determining the criteria for eligibility for loans, the policy-maker should therefore consider both:

- (a) the *efficiency criterion*, which will favour loan recipients who are chosen on academic grounds as likely to succeed in their studies and to repay their loans.
- (b) the *equity criterion*, which will take account of the financial need of applicants.

The selection of students who meet the academic criterion is usually left to the staff of universities, colleges or other educational institutions. Academic staff are probably best equipped to judge whether a student is likely to complete his/her studies successfully, and most student loan programmes require that borrowers maintain 'satisfactory academic progress'.

The question of how to determine financial need raises more difficult issues. A means test which takes family income into account can be used to determine eligibility for grants or subsidised loans. One option is to adopt a 'sliding scale' which calculates an assumed parental contribution to the costs of higher education, and then provides loans or grants to cover the difference between the assumed parental contribution and the actual costs of study. This raises the question of how to obtain information about family income level. Countries such as the Federal Republic of Germany require students to submit a copy of their parents' income tax return, which is used to determine family income level. Others require students to fill in a form to provide this information. Sweden is unusual in taking no account of parental income in determining eligibility for loans. All students over the age of 20 are

assumed to be financially independent, so that the means test is applied only to students' own incomes.

The College Scholarship Service in the USA has developed a complex methodology of 'need analysis' which takes account of family income, the number of dependent children, any unusual factors such as medical expenses, and the value of assets, including the family home. The assumption underlying needs analysis in the USA is that parents are expected to make a significant contribution to the costs of their children's education, if they can afford it. Many other countries also use a test of financial need to determine eligibility for student loans. For example, in Canada, parents are expected to contribute to the cost of their children's higher education, and eligibility for loans is determined on the basis of various criteria, including financial need (see boxes on pages 44 and 45).

In developing countries the administration of a means test may present considerable problems because of the lack of accurate data on family incomes for income tax or other purposes, particularly in a subsistence economy. In general, an effective means test, or test of financial need, requires information on:

- * numbers in the family group
- * earned income of all members of the family
- * non-earned income
- * ownership of assets such as property or land
- * number of dependent children
- * special circumstances (eg. unemployment or illness).

In Latin America some educational institutions apply a 'sliding scale' of fees, which requires detailed information about family income. In Peru, for example, universities charge differential fees according to a student's family income level, which is judged on the basis of parents' earnings, number of dependents, and assets such as land, property, bank accounts, savings etc. In order to estimate a student's 'ability to pay', university staff require extensive information about family income. In Peru this is collected in a personal interview with students and their parents. In these interviews they ask questions about ownership of assets such as a

Determining Eligibility for Student Loans

In Hong Kong, applicants for loans have to provide information on both earned and unearned income of all members of the household and all brothers and sisters, even if resident outside Hong Kong. This must be supported either by documentary evidence or by a signed certificate from employers, and all family and household members must sign a form which allows the Joint Committee on Student Finance (JCSF) to investigate the accuracy of their statements. Spot-checks are made on a random sample of applications, and these include visits to the home to verify details provided. Applicants who provide false information are liable to be prosecuted, which reduces the temptation to cheat. Such a system is expensive to administer, but does ensure that loans are given only to students with genuine financial need.

In Canada, the terms of student loans vary between the provinces. In the province of Ontario, for example, applicants must satisfy various criteria including:

- Citizenship*
- Residence*
- Study in an approved institution*
- Study on an approved course*
- Satisfactory Scholarship standing*
- Calculated financial need, taking into account the costs of different courses, and a student's 'available resources', including parental income.*

The assessment process in Ontario is illustrated on the next page.

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graph TD
    Start((Start)) --> D1{Eligible for OSG?}
    D1 -- YES --> P1[Calculate Costs allowable under Study Grant Plan]
    P1 --> P2[Calculate Resources Available]
    P2 --> P3[Costs - Resources = Calculated Financial Need]
    P3 --> P4[Satisfy Calculated Need with Study Grant (up to OSG limit)]
    P4 --> D1
    D1 -- NO --> D2{Eligible for CSL?}
    D2 -- YES --> P5[Calculate Costs allowable under Canada Student Loan Plan]
    P5 --> P6[Calculate Resources Available (including any Study Grant)]
    P6 --> P7[Cost - Resources = Calculated Financial Need]
    P7 --> P8[Satisfy Calculated Need with Canada Student Loan (up to CSL limit)]
    P8 --> D3{Calculated Need Satisfied?}
    D3 -- YES --> F1((Finish))
    D3 -- NO --> D4{Eligible for OSL?}
    D4 -- YES --> P9[Satisfy remaining Calculated Need with Ontario Student Loan (up to OSL limit)]
    P9 --> F2((Finish))
    D4 -- NO --> F3((Finish))
    D2 -- NO --> D5{Eligible for OSL?}
    D5 -- YES --> P10[Calculate Costs allowable under Ontario Student Loan Plan*]
    P10 --> P11[Calculate Resources Available (including any Study Grant)*]
    P11 --> P12[Costs - Resources = Calculated Financial Need*]
    P12 --> P13[Satisfy Calculated Need with Ontario Student Loan (up to OSL limit)]
    P13 --> F4((Finish))
    D5 -- NO --> F5((Finish))
  
```

The flowchart illustrates the process for determining financial need for a student, starting from 'Start' and ending at 'Finish'. The process involves three main paths based on eligibility for OSG, CSL, and OSL. Each path calculates costs, resources, and financial need, and then checks if the need is satisfied. If not satisfied, it checks for eligibility for OSL and, if eligible, calculates the remaining need to be satisfied by OSL.

Path 1: Eligible for OSG?

- If **YES**: Calculate Costs allowable under Study Grant Plan → Calculate Resources Available → Costs - Resources = Calculated Financial Need → Satisfy Calculated Need with Study Grant (up to OSG limit) → Loop back to Eligible for OSG?
- If **NO**: Proceed to Path 2.

Path 2: Eligible for CSL?

- If **YES**: Calculate Costs allowable under Canada Student Loan Plan → Calculate Resources Available (including any Study Grant) → Cost - Resources = Calculated Financial Need → Satisfy Calculated Need with Canada Student Loan (up to CSL limit) → Check if Calculated Need Satisfied?
 - If **YES**: Finish.
 - If **NO**: Proceed to Path 3.
- If **NO**: Proceed to Path 3.

Path 3: Eligible for OSL?

- If **YES**: Calculate Costs allowable under Ontario Student Loan Plan* → Calculate Resources Available (including any Study Grant)* → Costs - Resources = Calculated Financial Need* → Satisfy Calculated Need with Ontario Student Loan (up to OSL limit) → Finish.
- If **NO**: Finish.

Path 4: Calculated Need Satisfied? (from Path 2)

- If **YES**: Finish.
- If **NO**: Check if Eligible for OSL?
 - If **YES**: Satisfy remaining Calculated Need with Ontario Student Loan (up to OSL limit) → Finish.
 - If **NO**: Finish.

Key: OSG Ontario Study Grant
CSL Canada Student Loan
OSL Ontario Student Loan

house, or car, as well as about parents' jobs and earnings. Such questions provide only a very rough picture of family income level, but they may help to supplement information provided on an application form to determine eligibility for grants, loans or reductions in tuition fees.

However, a means test that relies on personal interviews is time-consuming and expensive. Moreover in some countries it would be impossible, for geographical or administrative reasons. It may be better, therefore, to establish eligibility for loans in two stages. Initially students should provide written evidence; this may be supplemented, where necessary by an interview.

Some countries, such as Hong Kong, require very detailed tests of family income and ability to pay. This may provide detailed and accurate information about family incomes, but there is likely to be a trade-off between detailed, accurate information and the costs of collection and verification.

4. What Proportion of Students will Receive Loans?

One crucial decision to be made in designing any system of student support is the scale of the programme, as measured by the number and proportion of students who benefit. The number of grants or loans awarded each year will obviously depend on the size of the country, its wealth, and the structure and finance of higher education.

There are considerable variations in the proportion of students who receive financial aid in different countries. Some loan programmes are very small, in term of both actual numbers and the proportion of students receiving assistance, whereas some richer countries help the majority of students by means of loans. In Sweden about 60% of all students and 80% of full-time students receive loans. In Japan, on the other hand, only 11% of undergraduates receive loans. In Hong Kong roughly half of all full-time students receive loans, but in many developing countries where loan schemes operate the proportion of students who have loans is under 10%.

Decisions about the proportion of students who can be given financial assistance will depend partly on fee policies. Where students are expected to pay fees for tuition or for board and

lodging, there is a more obvious need for a programme of financial assistance than in countries where fees are minimal and institutions highly subsidised. Some developing countries, particularly in Africa, not only provide free tuition but also provide free board and lodging or give generous scholarships or grants for living expenses. This may be the result of geographical factors which make boarding necessary, but it increases the public costs of higher education substantially.

In determining the size of a loan programme, the planner should consider the costs of alternative options, taking account of:

- * the number and proportion of the age group who participate in higher education
- * the criteria for eligibility; i.e. is selection on the basis of merit or financial need?
- * the level of tuition and boarding fees
- * availability of other forms of financial assistance.

The costs of a selective loan programme will obviously be lower than those of a universal scheme, but in some circumstances a country could actually reduce expenditure by introducing loans, even if *all* students were eligible for a loan. A country which charges low or zero fees for tuition and boarding, or provides tuition fees and scholarships or stipends for all students, could save public expenditure in the long run by giving loans instead of scholarships and stipends. The extent of the saving would depend on the cost of education, the terms of the loans, and the success in securing repayment. A recent World Bank study (Mingat and Tan 1986) showed that student loans which would be repaid over 10 years, with loan repayments equalling 5% of graduates' average incomes, could recover a significant proportion of university costs in many developing countries. The scope for cost recovery varied from 16% in a typical country in Anglophone Africa, 36% in Francophone Africa and over 40% in some Latin American countries. Differences in the extent of the savings reflect differences in the costs of higher education and in average graduate salaries, but in all these cases the introduction of a loan programme could result in a reduction in public subsidies for higher education, even if *all* students receive a loan.

On the other hand, a country which provides very little financial assistance for students may choose to introduce a small-scale loan

programme for students in financial need. In such cases a loan scheme which covers only 5 or 10% of all students would nevertheless represent a substantial increase in financial aid, and if the loan scheme is heavily subsidised — with a long repayment period and low interest rate — it would require an increase, rather than a reduction in public expenditure.

This emphasises, once again, that decisions about the scale and the terms of a loan programme will depend on whether the government wishes to increase or to reduce the level of subsidy for higher education.

5. *What Size of Loan will be Provided?*

In deciding what size of loans should be made available to students, the planner must determine the *average* and the *maximum* loan per student, both in terms of annual borrowing limits and the maximum total debt that a student may incur. This must take account of:

- * the average costs of higher education to the individual student, ie. tuition costs, books, educational materials, living expenses and travel; which of these items of cost will be covered by the loan?
- * variations in costs or charges, particularly between public and private universities and colleges, or between different levels and subjects within these institutions;
- * the length of course;
- * other sources of financial aid; and
- * opportunities for part-time employment.

Many student loan agencies conduct regular surveys of student expenditure, and try to relate the size of loans to what students actually spend. In other cases, the size of loan is fixed with reference to a 'typical budget', which is drawn up in consultation with university authorities. In developing countries this may be simpler than attempting a detailed survey of what students actually spend, but it is important to ensure that the typical budget is realistic.

Setting the maximum size of loan also needs to take account of what is regarded as a 'manageable' debt, ie. a debt which can be repaid without imposing excessive burdens on borrowers, which could either lead to high rates of default, or to distortions in the future spending of graduates.

What is a manageable debt for student borrowers? Answers vary between countries, and depend partly on the level and pattern of graduates' expected earnings, and partly on what students and society regard as a 'reasonable' level of debt, which depends on a variety of cultural factors. The borrowing limits, which determine the maximum size of loan, will therefore be dependent on two related policy decisions:

- * What are the repayment terms for the loans? (See Section 6)
- * What is an acceptable burden of debt? (See Section 7)

6. What are the Repayment Terms for Student Loans?

The repayment terms of a loan determine how quickly a borrower will repay the amount of money borrowed (the capital) and the rate of interest charged (if any). In fact the repayment terms actually depend on a series of decisions:

(a) What rate of interest will be charged?

Should student borrowers pay interest which reflects market rates of interest, or will the government subsidise the interest on student loans? Most loan programmes provide some interest subsidy, in order to encourage students to invest in higher education, particularly in the case of low income students. However the rate of interest charged varies enormously (see box on p. 50). There are a few cases of interest-free loans, for example in West Germany. In Pakistan loans are interest free because the Islamic religion is opposed to the concept of interest or usury. However, in many countries high rates of inflation have forced governments to charge high rates of interest. For example, the ICETEX loan programme in Colombia now charges 25% a year, which reflects the very high rates of inflation in many Latin American countries in recent years.

Repayment of Student Loans

Student loans in Indonesia are available on the basis of a strict means test at 6% interest, and must be repaid in 5 to 7 years. There is a grace period of one year before graduates are required to begin repayment. After one year they are expected to repay their loans by means of regular monthly instalments. In the case of public sector employees (such as teachers or civil servants), loan repayments are deducted at source by the employer; but other employees are expected to pay their monthly instalments at the local branch of the state-owned bank(BNI 1946), which administers the loan scheme. The maximum loan repayment is fixed at 30% of a graduate's gross monthly salary, but the majority of graduates pay considerably less than this. A typical monthly repayment is Rp 10-12,000, which is 10% of the starting salary of a graduate in the civil service.

In Japan, there are two types of loan: students at the upper secondary level, and low-income university students are eligible for interest free loans; university students who do not qualify for an interest free loan, on grounds of low income, can have a loan at 3% interest. Annual instalments depend on the size of the loan.

In Canada, loans are interest-free during study, and during a 'grace period' of six months. After this, the rate of interest that a borrower pays is fixed by the provincial student loan agency, in relation to market interest rates. This means that students who borrow when interest rates are high must pay more than those who borrow when interest rates are low. In the early 1970's the interest on student loans varied between 7 and 9%, but in the early 1980's the rate of interest was between 13 and 15%.

The relationship between market rates of interest in a country and the rate of inflation is often complex. High rates of inflation usually mean high rates of interest; but there is often a time lag.

Decisions about interest rates must, therefore, take account of both market rates of interest and inflation. In fact, it is the relationship between inflation and interest rates that determines the *real* rate of interest of a loan (i.e. the nominal interest rate minus the annual level of inflation).

One option, which has been adopted in some countries, is that graduates are not charged a fixed rate of interest but are expected to repay their loans in terms of money of constant purchasing power. This was tried in Sweden during the 1960's, when a student's total debt was linked with the cost of living index and the amount to be repaid rose each year in line with inflation. However when inflation increased in the 1970's, graduates disliked the uncertainty involved, and Swedish loan repayments now rise by a constant amount each year, which is equivalent to an interest rate of 4.2%. If the annual rate of inflation is higher than this, then the *real* interest rate on student loans will actually be negative. Whenever the interest rate on student loans is less than the true market rate of interest (taking account of alternative investment opportunities and inflation), then this is equivalent to providing a 'hidden grant', since it means that the borrower will not repay the full value of the loan. (See box on page 30.)

(b) What grace period will be allowed?

Most loan programmes allow a 'grace period' which is intended to give newly qualified graduates a period in which they can find a job and establish themselves in regular employment, before they are required to repay their loan. This varies from six months after graduation in Japan to two years in Sweden. In some countries the grace period applies to both interest and capital, which means that borrowers are not liable for any repayments while they are studying and for a period after graduation. An alternative option adopted by some American loan programmes is to charge interest during the period of study, but to allow it to accumulate. This means the borrower does not actually pay interest during the period of study, but the accumulated interest owed is added to the student's total debt on graduation. This option still gives graduates an opportunity to find a job before they must start to repay the loan, but it involves less subsidy than a grace period which is totally interest free.

A problem in many developing countries in recent years is that

students may face a period of unemployment after graduation, before finding their first job. If the grace period is not increased, to take account of the difficulty of finding employment, it is likely to lead to high rates of default. On the other hand, if interest rates on student loans are low, a longer grace period will increase the costs of the interest subsidy.

(c) What is the length of repayment period?

The length of repayment varies from three or four years in Colombia and Hong Kong, to 20 years or more in Sweden and the Federal Republic of Germany. A repayment period of 10 years is fairly typical. Not only does the length of repayment vary considerably in different programmes, but there are also variations in the degree of flexibility. One option, adopted in several countries, is to make the length of repayment dependent on the size of a student's debt on graduation. In Sri Lanka, for example, the length of repayment of loans offered by the People's Bank under the University Student's Loan Fund Act of 1972 varies from two to five years, according to the size of a graduate's debt.

An alternative is to fix the repayment period in relation to the length of study. Some Latin American programmes, for example, require students who borrow for four years to repay the loan in four years.

(d) Is the loan to be repaid in equal instalments, or can they be varied, according to a graduate's income?

Many loan programmes require loans to be repaid in equal annual instalments. Some countries have introduced variable repayment schedules, in an attempt to spread the burden of repayment more evenly over the graduate's working life. Graduate earnings generally rise with age, so that repayments in equal instalments will represent a much heavier burden in the early years than in the later years. If, on the other hand, instalments rise with age, the repayment burden will be spread more equally over the life of the loan (see box on page 53).

An alternative option is an 'income-contingent' loan, which means that loan repayments vary with a graduate's income, and students undertake to repay their loans by means of a fixed proportion of their income or earnings. This means that graduates

An Example of a Loan Repayment Schedule

In Sweden, graduates have until their 50th birthday to repay the loan, so repayments of loans are spread over about twenty years. An 'adjustment index' is applied each year. This was originally set at 3.2% (now raised to 4.2%). An example of typical loan repayment schedule in Sweden in 1981, when the adjustment index was 3.2%, is shown below:

Example of Repayment of Student Loans in Sweden, 1981 (S.Kr.)

<i>Year</i>	<i>Total debt 1st January</i>	<i>Annual Payment</i>	<i>Total debt after payment</i>	<i>'Adjustment Index' Increase 3.2%</i>	<i>Total 31st December</i>
1	84,836	4,242	80,594	2,579	83,173
2	83,173	4,378	78,795	2,521	81,316
3	81,316	4,518	76,798	2,458	79,256
4	79,256	4,663	74,593	2,387	76,980
5	76,980	4,812	72,168	2,309	74,477
6	74,477	4,966	69,511	2,224	71,735
7	71,735	5,125	66,610	2,132	68,742
8	68,742	5,289	63,453	2,030	65,483
9	65,483	5,458	60,025	1,921	61,946
10	61,946	5,633	56,313	1,802	58,115
11	58,115	5,813	52,302	1,674	53,976
12	53,976	5,999	47,977	1,535	49,512
13	49,512	6,191	43,321	1,386	44,707
14	44,707	6,389	38,318	1,226	39,544
15	39,544	6,593	32,951	1,054	34,005
16	34,005	6,804	27,201	870	28,071
17	28,071	7,022	21,049	674	21,723
18	21,723	7,247	14,476	463	14,939
19	14,939	7,479	7,460	239	7,699
20	7,699	7,699	0	0	0
Total		116,320		31,484	

Source: Woodhall (1982)

with high earnings repay their loans more quickly than those in low paid occupations. This has been proposed in the USA and in Britain, but there have been very few examples of truly income-contingent loans. One or two private universities in the USA experimented with income-contingent loans in the 1970's (Johnstone 1972) and recently some universities have once again begun to experiment with new types of loan. It is possible, therefore that income-contingent loans may re-emerge in the USA, but there are as yet no examples in developing countries.

In choosing between the various options, the planner must take account of:

- * the costs to the government of alternative rates of interest subsidy
- * the burden of debt facing borrowers
- * the likely rate of default if repayment terms are too harsh.

There will inevitably be certain trade-offs to be considered. For example, generous repayment terms may make it much easier to introduce a loan scheme for the first time, but will increase the costs to the government. An increase in the interest rate or a reduction in the length of repayment or grace period may generate a saving of public funds, or it may simply increase the rate of default, or discourage students from taking loans.

There may also be a trade-off between a longer repayment period and a higher rate of interest. For example, in Hong Kong loans until 1987 were interest free but there was no 'grace period' and students normally repaid their loans within five years of graduation. The interest subsidy in such a scheme may cost the government no more than under a programme which charges interest, but permits a longer repayment period.

In designing a loan programme, therefore, an administrator needs to calculate the costs of alternative levels of subsidy which result from different interest rates and different repayment terms. Chapter 3 suggests how a computable model can be developed to examine the effects of alternative repayment terms and other variables both on the cost of the loan programme to the government, and on the burden of debt facing a graduate who has financed higher education by means of a loan.

7. How much Burden of Debt should Students Accumulate?

The maximum size of loans depends on decisions about what is an 'acceptable' burden of debt. Some loan programmes are particularly concerned to ensure that the burden of debt does not impose financial hardship on graduates who are repaying their loans, while others are more concerned with cost recovery.

The Swedish system is unusual in providing for automatic postponement of repayments in cases where graduates have low incomes, due to illness, unemployment or employment in low-paid jobs, or because they are looking after children and unable to work. In 1985 13% of graduates were granted such postponement. This takes care of the problem of married women who cannot repay their loans while they are looking after babies or young children — a problem which is sometimes used by critics of loans to suggest that they will discourage women, by acting as a 'negative dowry'. In Sweden a married women may postpone repayment and her debt is not automatically transferred to her husband, which means that Swedish women are just as willing to borrow as men. However, such a scheme imposes substantial costs on the government, which both guarantees the loans and pays an interest subsidy.

Very few countries follow the Swedish example in providing for automatic postponement of repayment if graduates have low incomes. The alternative is to stipulate that graduates must apply to the bank or loan agency, in cases of financial hardship, in which case the question is what constitutes 'hardship'. Some programmes state that postponement is possible only in 'exceptional circumstances', such as serious illness; others are more liberal in granting postponement.

Any definition of financial hardship raises the question of how much of a graduate's income should be devoted to loan repayments. Most loan programmes set borrowing limits that mean, on the basis of average wage and salary levels, that most graduates have to devote no more than 10% of their income to repaying their loans. In some countries a proportion of 10% may be regarded as too high, while in other cases, an even higher proportion may be regarded as reasonable, particularly if there is a substantial difference between graduate and non-graduate earnings.

In the case of other types of loan, commercial banks usually set their own yardsticks. For example, when lending for purchase of

What is a Reasonable or an Excessive Level of Debt?

This question has caused much controversy in the USA, where 4.3 million students borrowed over US\$ 9 billion in 1985. Costs vary enormously in the USA according to type of institution and level of course. In 1985/86 average costs ranged from \$3,000 to \$15,000 a year, which would mean \$12,000 to \$60,000 in total for a 4 year degree course. The borrowing limits of GSLP and PLUS loans are set as follows:

Students cannot borrow more than the total cost of education at their particular institution, defined as tuition fees plus 'reasonable' living expenses, books, equipment and travel. Undergraduates cannot borrow more than \$2,500 a year and \$12,500 in total. Graduate students cannot borrow more than \$5,000 a year and \$25,000 in total.

A recent survey of students in California, by Hansen and Rhodes (1986) showed that 59% of final-year undergraduates had incurred debts. The average debt was \$4,900, but 10% of students had debts of \$10,000 or more. In general, in the USA, graduates with the biggest debts - such as doctors and lawyers - can look forward to higher than average incomes. Based on an average graduate income of \$20,000 the borrowing limits set by the GSLP would mean that just over 9% of a graduate's income would have to be devoted to loan repayments, and recent research showed that approximately 90% of GSL borrowers had to spend less than 10% of their gross income on loan repayments.

The results of the California survey suggest that if loan repayments of 10% are regarded as a reasonable level of debt, then only 9% of all GSLP borrowers have excessive debts.

consumer durables banks are often willing to lend up to 30% of gross income, and for loans for house purchase considerably more than this. But student loans generally have much longer repayment periods than consumer loans and are regarded as much more risky than loans for house purchase, where the bank has the security of the house — which can always be sold if the borrower defaults on the loan.

In the USA, where dependence on loans has increased sharply in recent years, there has been concern about whether students are incurring excessive debts. A debt may be regarded as excessive if it will either lead to high rates of default in the future or have adverse effects on future patterns of expenditure and borrowing for other purposes, such as home ownership and consumer loans. There is no general agreement about what is 'manageable' or 'excessive' debt but recent research on debt levels in the USA suggest that repayments which require 10% of income are not regarded as excessive, and in fact 90% of GSLP borrowers need to spend less than 10% of their gross income on loan repayments (see box on page 56).

Other countries also use 10% of graduate income as a rough yardstick for determining reasonable levels of debt. For example in Hong Kong the Director of Audit estimated that under the existing scheme loan repayments require only 6 or 7% of the average starting salary of a university graduate, and suggested that the size of loans should be increased, as loan repayments of 10% of income would be perfectly reasonable (see box on p. 58).

However, alternative definitions of 'reasonable' or 'excessive' burdens of debt may be preferred, and Chapter 3 gives an example of a computer model which can be used to analyse a student's burden of debt.

8. How will Loan Repayments be Collected?

Critics of student loans frequently suggest that it will prove difficult, particularly in developing countries, to secure repayment of loans and prevent default, ie. failure to repay the loan. Certainly inadequate collection procedures have proved to be a weakness of some loan programmes, for example in Sri Lanka (see box on p. 59). But in other countries, for example Hong Kong and Japan, banks or loan agencies have proved quite successful in collecting loan repayments and maintaining low levels of default.

How Much of a Graduate's Income is Required for Loan Repayments?

In Hong Kong the Director of Audit recently calculated that at current salary scales, graduates repaying student loans would need to allocate 6 to 7 per cent of their salary for 5 years to repay their loans. When average salaries of graduates were compared with those of non-graduates, it was found that loan repayments would represent between 20 and 27% of the earnings differential of university graduates and between 13 and 42% of the earnings differential enjoyed by diploma holders from the polytechnic (see Table).

On the basis of these figures, the Director of Audit recommended that Hong Kong students should receive all their financial assistance in the form of a loan, instead of a mixture of grant-plus-loan, as at present. Until 1987, loans in Hong Kong were interest-free, so that even if all grants were converted to loans, the loan repayments would still represent only 8 to 10% of average starting salaries and 18 to 58% of differential earnings.

Percentage of Earnings which would be Required as Repayments of Full Loans

Institution	% of Total Monthly Earnings		% of Extra Monthly Earnings	
	Existing Loan Repayments	Total Assistance	Existing Loan Repayment	Total Assistance
Hong Kong Univ.	6%	8%	20%	30%
Chinese Univ.	7%	10%	27%	37%
Hong Kong Polytechnic				
Higher Diploma	7%	9%	42%	58%
Diploma	6%	8%	13%	18%

Source: Hong Kong Director of Audit 1985, p. 23.

Loan Collection in Sri Lanka

In Sri Lanka, two research studies on the University Students Loan Scheme, carried out for the People's Bank (Hewagama 1978 and Hemachandra 1982) concluded that loan recovery procedures had not worked well, with the result that loan repayments represented only about 15% of the total value of loans awarded in Sri Lanka between 1964 and 1980. The main reasons for this were:

- (a) "Many students who obtained loans avoid repayment even after they have obtained employment."*
- (b) "Inadequate attention (had been) paid by the Bank to recoveries of loans" (Hemachandra 1982, p. 4).*

One reason for this lack of concern about loan repayments may be that the People's Bank which administers the loan scheme is a state-owned bank, and does not have an obligation to make a profit like a private commercial bank. Rather its role, with respect to the student loan programme, is to act as an agent for the government, and administer a government programme financed entirely from public funds.

In fact, in Sri Lanka the student loan programme has been partially replaced by a programme of scholarships financed by a National Lottery (the Mahapola Higher Education Scholarship Trust Fund). At the same time, however, the government has attempted to improve enforcement of loan repayments, and a new Higher Education Loan Act passed in 1983 requires employers to collect information from all their employees about outstanding loans, and to pass on this information to the Bank. All new employees are also required to give information about outstanding loans, and employers will be required to deduct loan repayments from their monthly salaries. The effectiveness of these measures will, of course, depend on whether the government of Sri Lanka is prepared to prosecute employers who do not comply.

Success seems to depend crucially on the attitude of banks or loan agencies. If banks can easily declare a loan to be in default and claim the full value of the loan from the government or guarantee agency, then they will have little incentive to improve loan collection procedures. This was illustrated by the American experience in the 1970's, when it was comparatively easy for banks to declare a loan to be in default whenever a borrower was slightly in arrears. This meant that some banks and institutions did not bother to maintain up-to-date records. More recently there have been vigorous efforts to improve collection procedures. State guarantee agencies now monitor loan repayments carefully; many have computerised loan records and have tried to identify institutions with poor recovery procedures. Some borrowers who defaulted on loan repayments have been prosecuted and the Internal Revenue Service, which collects and administers income taxes, has withheld income tax rebates from loan defaulters. The result is that American default rates have now fallen (see box on p. 61).

Experience in other countries also shows that default rates can be reduced and maintained at a low level. In Japan, efforts to improve collection procedures have included:

- * introducing new methods of repayment, which make it simpler for borrowers to pay their regular instalments, for example by bank standing orders, direct deductions from salary by employers etc.
- * asking universities to help trace missing students
- * rescheduling debts for borrowers facing temporary difficulties
- * sending all borrowers a newsletter with information about the loan programme and a list of defaulters.

The success of these efforts has markedly increased the rate of recovery of student loans in Japan from only about 53% in the mid-1950's to 95% in the late 1970's and 97% in 1985.

In Hong Kong also the loan programme has a good record of loan recovery. In January 1986 only 365 borrowers defaulted on their loans, out of a total of 18,600 whose loans were due for repayment. There are of course reasons why loan default may pose fewer problems in Hong Kong than in many developing countries. It is comparatively easy to keep track of borrowers in a small country, with a highly centralised government and an efficient banking system. Students and their parents are familiar with banks.

Default Rates in the USA

Critics of loans sometimes point to high default rates in the USA, and it is true that a few institutions have experienced very high rates of default. However, an analysis of default rates in the Guaranteed Student Loan Program (GSLP), which made over 20 million loans worth \$35 billion between 1965 and 1982, and the National Direct Student Loan Program (NDSLP) which made 7 million loans worth \$8 billion, concluded that:

- (a) Taking account of the money that is eventually collected from borrowers who make late repayments, the 'net' default rates for GSLP loans were between 3.8 and 5.8%.*
- (b) The default rate in other federally-insured programmes, such as the Small Business Administration, appears to be no better and is sometimes worse than for student loans.*
- (c) About \$10 billion of the loans were in repayment status in 1983 and "the vast majority (ie. over 90%) are being repaid on a prompt and regular basis".*
- (d) Federal costs for default-related claims on GSL's have declined as a proportion of the total costs of GSLP. Costs associated with defaults amounted to less than 10% of total federal expenditure on the GSLP in 1981 and 1982.*

Agencies have improved their loan servicing and collection procedures in recent years. State guarantee agencies have made significant strides in implementing procedures to prevent GSL defaults and to collect on defaulted loans (Hauptman 1983).

Hauptman concludes: "Although loan defaults continue to require close attention, the problem is not as disastrous as critics have claimed."

Moreover, the Government of Hong Kong has taken measures, such as circulating lists of all loan defaulters and their guarantors to immigration officials at all points of entry and exit, which would prove very difficult in large countries with high mobility and many entry and exit points. Nevertheless, the Hong Kong experience is instructive in showing that determined efforts to secure loan repayments can be successful.

It is clear that there are many factors, including deep-rooted cultural influences, as well as geographical or social factors, which may help to determine success in securing loan repayments. But experience in several countries shows that success can be achieved, and that the necessary steps for ensuring efficient collection of loan repayments include:

- * Simple but effective *mechanisms* by which borrowers can make repayments: the simplest may be to use the income tax collection system, although very few countries have so far attempted this. An alternative is to ask employers to deduct loan repayments from employees' salaries. This is the method of collecting repayments in the new loan programme in China. However, it may be easier in countries where a high proportion of graduates are employed in the public sector than in countries with a substantial private sector.
- * Efficient systems of *record-keeping*, by banks or loan agencies. Large scale loan programmes in several countries rely heavily on computerised records. In developing countries employers' records may be used. For example in some countries employers are required to inform the government loan agency of any employee who has an outstanding loan, and to collect loan repayments.
- * Determined efforts to *pursue defaulters*, and if necessary prosecute. Some programmes incorporate *penalties* for late payment (eg. in Germany and Hong Kong where borrowers in arrears must pay interest).
- * Widespread *publicity*, at the launch of the programme, to ensure that students understand and accept their obligation to repay loans.
- * Possibilities for *postponement* in the case of genuine hardship. Few countries can afford the Swedish system of automatic

postponement for those on low incomes, but borrowers are more likely to accept the obligation to repay if they know that cases of genuine hardship will be considered sympathetically.

9. Will the Loan Programme Incorporate Incentives?

A number of loan programmes incorporate incentives for students. For example, in Germany, the government is anxious for students to complete their studies in the minimum time, since many students study part-time, or take time off in the middle of their degree course to work, which extends their period of study over many years. The student loan programme therefore incorporates loan forgiveness incentives, which means that students who complete their study in the minimum time, and achieve high grades, have up to 30% of their debt written off on graduation.

Similarly, in Barbados students receive 'loan-grants', and the proportion of the loan which must be repaid depends on their performance. Those who complete successfully, in the 'normal' time, have up to 20% of their loan converted to a grant. Those who achieve high grades also have part of their loan converted to a grant. In such a scheme loans are regarded as a way to increase student motivation, in addition to their function of providing financial assistance for the needy.

In the USA loan forgiveness or cancellation has been used to try to encourage graduates to enter the teaching profession. When the first loan programme was established in the late 1950's, it included loan forgiveness clauses to encourage students to become secondary school teachers, but experience showed that this had little effect on students' career choices. Instead, students who had already decided to become teachers were willing to take larger loans, in the knowledge that part of their debt would be cancelled. Nevertheless, a number of American states have recently re-established loan forgiveness provisions in their student loan programmes, in an attempt to recruit teachers of shortage subjects such as mathematics.

Cancellation of part of a graduate's debt if he or she works in a particular shortage occupation is an alternative option to the 'bonded scholarships' which are offered in some countries to attract teachers or other public servants. Several countries offer bonded scholarships which must be repaid if a graduate does not

enter or remain in the particular occupation for which he or she was trained. Enforcement of this may, in some cases, be just as difficult as enforcement of loan repayment. One problem with bonded scholarships is that they quickly create the expectation that students will be guaranteed employment after graduation. Such an expectation may be realistic when a programme is first introduced at a time of manpower shortage, but difficult to change when labour market conditions change and shortages are transformed to surpluses. For example, in Egypt a guaranteed employment scheme for graduates was introduced on an experimental basis in 1963, and made permanent in 1973. Critics argue that this system in Egypt is responsible for excess demand for higher education and inefficiencies in the labour market, particularly in the public sector.

This illustrates the danger that a system of incentives, introduced at a time of labour shortage, may in time give rise to the opposite phenomenon of a labour surplus. Any system of employment incentives introduced into a loan programme should be sufficiently flexible to ensure that it can be withdrawn when labour market conditions change. In addition, any system of incentives must be evaluated by means of:

- * careful monitoring, to compare students with loans and those without, in order to assess the effectiveness of loan forgiveness clauses.
- * careful comparison of loan forgiveness clauses with alternative options, for example direct increases in salaries of graduates in shortage occupations, to compare their cost-effectiveness.

10. How Flexible will the Loan Programme be?

Given the large number of variables in a student loan programme, it is clear that loans are potentially a very flexible instrument. This flexibility shows itself in two ways:

- * There are a large number of different types of student loan, with different repayment terms, and different combinations of loan and grant, so that the planner can choose between a wide range of alternatives.

- * Loan programmes can incorporate flexibility into their design, for example in providing variable repayment terms for different categories of student, different interest rates for students from different income groups (as in the USA), loan forgiveness clauses for students who meet certain conditions (as in Barbados or West Germany) or automatic postponement or repayments for students with low incomes (as in Sweden).

In designing a student loan programme the planner can take advantage of the potential flexibility of this form of finance, in choosing between alternative options, for example between a pure loan scheme or a loan-plus-grant, or between subsidised or unsubsidised loans.

In addition the policy-maker must decide how much flexibility to incorporate into the design. Many programmes offer flexibility of repayment terms for particular categories of student, e.g.:

- * married women, who may be allowed to postpone repayment while they are looking after children.
- * students who study abroad and thus incur large debts, who may be allowed a longer period of repayment.

However some loan programmes are designed to be even more flexible. For example, the idea of a 'loan-grant', as it has been developed in Barbados, deliberately sets out to maximise flexibility, and uses variations in the proportion of loan that must be repaid as a policy instrument, to reward those who achieve high marks or who enter particular occupations. Another example is the loan-bursary scheme in Lesotho, the main objective of which is to provide skilled manpower for the economy, particularly for the public sector. This is reflected in the loan repayment terms (see box on p. 66). If the borrower works in Lesotho for a minimum of five years after graduation, then 50% of the loan is transformed into a bursary; if the graduate works in the private sector, then a higher proportion of the loan (65%) must be repaid, and those who choose not to work in Lesotho are expected to repay all their loan.

However attempts to incorporate flexibility in this way raise a number of questions:

Loan Bursary Agreement of the Government of Lesotho

WHEREAS the Borrower has requested the Government to assist in financing the entire training of the Borrower by granting a loan to him in the amount specified hereunder:

AND WHEREAS the course of training of the Borrower is justified from the standpoint of the priorities reflected in the national development plans of Lesotho.

AND WHEREAS the Government has agreed, on the basis, inter alia, of the foregoing, to grant a loan to the Borrower in the amount of

NOW THEREFORE, the two parties hereby do agree as follows:

1. The Borrower undertakes:—

- (a) to serve the country after the completion of his course of study for a minimum of 5 years;
- (b) where studies are undertaken abroad, to return to Lesotho immediately on completion of the authorised course of training or to pay 100% of the loan forthwith;
- (c) not to change his course of study without the written consent of the National Manpower Development Council on behalf of the Government. Any application to change the course of study shall only be considered by the said Council subject to a written recommendation of the Tutor or Head of Department of the institution concerned;
- (d) to attend, during the course of his training, all lectures, tutorials, field work, practical work and all other training required for his course and to successfully complete each study year. A student will be excused from this condition only on production of medical certificate stating that the disease was the cause of failure;
- (e) not to commit a criminal offence;
- (f) not to use habit-forming drugs whatsoever;
- (g) not to be found drunk.

2. The Government undertakes:—

- (a) to pay the travelling expenses of the Borrower to and from the location of training if such training is undertaken outside Lesotho;

- (b) to pay the living allowance and residential expenses of the Borrower, provided such costs do not exceed the normal student rate applicable to the specific educational institution;

- (c) to pay tuition, book allowance and any other allowances required for the course of training as spelt out in the official prospectus of the particular institution.

3. In the payment of the loan, the Borrower undertakes to repay

- (i) 100% of the loan if he decides not to work within Lesotho after the completion of the course of training;
- (ii) 65% of the loan if he decides to work in the private sector or for a para-statal organisation of which the Government has no controlling interest;
- (iii) 50% of the loan if he works in the Public Service or in Government-controlled para-statal organisation.
- (iv) For purposes of repayment of the loan by students training overseas, the loan fund to be repaid will be considered equal to the equivalent fees payable in Lesotho.
- (v) For students with a record of outstanding performance a 10% credit will be given i.e. for students in the public service or Government controlled parastatals and students in the private sector to pay 40% and 55% of the loan respectively.

- * How effective is the system for monitoring borrowers' future careers, and for enforcing different rates of repayment? For example, if graduates in the private sector have to repay a higher percentage of their debt, it may be more difficult to secure repayment, since it will often be more difficult to trace graduates in the private than in the public sector. Similarly, those who work abroad may be the most difficult to trace, but in Lesotho these borrowers must repay 100% of their loan. This clause may therefore be very difficult to enforce.
- * What will be the cost implications of increasing flexibility? A scheme which incorporates many variables will be more difficult and costly to administer than a simpler programme.

In this, as in other policy choices, there is no 'right' answer, but experience suggests that there may be advantages in introducing a fairly simple system initially and introducing administrative complexity and flexibility in the light of experience. In Barbados, for example, the concept of a 'loan-grant' is a recent modification to an initial programme, based on loans alone.

The final choice about the extent of flexibility in a loan programme will depend on the objectives of the student aid system, and particularly on the relative priorities given to manpower objectives, cost recovery, academic incentives and rewards, and equity. Chapter 3 shows how a computable model may help the planner in examining the implications of different policy choices, both for the borrower and for the lender. Finally, Chapter 4 gives some further details about how planners have resolved these policy choices in student loan programmes in both developed and developing countries.