

Fiscal Stress: Worldwide Trends In Higher Education Finance

By Hans Vossensteyn

Hans Vossensteyn is a senior researcher for the Center for Higher Education Policy Studies (CHEPS), University of Twente, the Netherlands.

While higher education is generally a high priority in boosting economic development, public budgets to sustain expansion of higher education systems remain limited around the globe. This fiscal stress creates an impetus for governments to develop various strategies to meet the growing demand—from both students and society—for higher education services. This article explores worldwide trends to cope with this issue. It addresses policy developments aimed at increased efficiency in higher education, such as development towards institutional autonomy and performance-based funding. In addition, the article shows that the issue of cost-sharing is gaining worldwide importance. Students and their families are required to pay larger shares of educational costs, as demonstrated in tuition and student aid policies in many countries. Finally, the article explores how internationalization can help relieve fiscal stress.

Leading world economists stress the importance of investing in the knowledge economy (World Bank, 2002). One way to accomplish this is by expanding higher education to increase educational attainment levels within societies. However, expanding higher education requires increased investments and a more efficient use of existing resources in an environment of limited public budgets. This challenge is referred to as “fiscal stress.”

This article explores policy responses to the growing demand for postsecondary higher education by examining worldwide trends in higher education finance. Efficiency and cost-sharing are crucial concepts in understanding this issue. Efficiency is defined as ways higher education institutions become responsive to the demands of their customers without increasing the budget. Cost-sharing is defined as “the predominant development towards a gradual transfer of the financial costs of higher education from governments towards the students and their families” (Johnstone and Shroff-Mehta, 2000, p.1). With public funds in most countries being limited, it is likely more emphasis will be placed on cost-sharing to meet the growing demand for higher education.

In examining the worldwide policies that have been adopted to deal with a situation of fiscal stress, this article first addresses the debate on the distribution of costs and benefits between students and societies as a whole. It then explores the policy options that are, or can be, used in response to situations of higher education austerity, particularly national developments in efficiency, tuition costs, student support,

privatization, and internationalization of higher education. Finally, it provides some brief conclusions.

The Public versus Private Debate

In many countries, the answer to the question of who should pay for higher education traditionally has been "the government." These countries view higher education as a public service. Gradually, however, higher education has come to be regarded as a shared responsibility between students and society.

The notion of cost-sharing revolves around the argument that public funds are limited. As a result, higher education increasingly must compete for scarce public resources with other important public services, such as health care, infrastructure, and primary and secondary education. As the demand for higher education continues to grow, even more resources will be necessary to maintain existing quality. Some argue that students often gain substantial personal benefits from higher education, and therefore fairness dictates that students and their families should pay part of their educational costs. Finally, some believe that if students pay part of their educational costs, they will make better-informed choices.

Not everyone, however, shares this view. Some suggest that cost-sharing may prevent people from entering higher education, particularly students from disadvantaged backgrounds. Others believe that the social benefits of higher education justify full public subsidies.

The debate shows that understanding private and public contributions to higher education requires a cost-benefit analysis. Table 1 provides an overview of the major costs and benefits of higher education for the individual student and to society as a whole.

Table 1 shows that higher education imparts substantial monetary and non-monetary benefits for both society and students. The major difficulty, however, is measuring precisely the extent of the benefits. Not all can be measured according to a single scale, if they can be measured at all. Nevertheless, rates of return analyses provide a baseline estimate of the pure economic value of education, including only the monetary costs and benefits of education (Dolton, Greenway, & Vignoles, 1997). These studies often suggest substantial private rates of return to higher education (Leslie and Brinkman, 1987; Heller, 1997). A recent OECD study showed that the wage premiums of graduates compared with individuals having only secondary schooling result in private rates of return to higher education ranging from 7 percent in Japan, 12 percent in the Netherlands, 15 percent in the United States and about 18 percent in the United Kingdom (Blöndal, Fields, & Girouard, 2002). Consequently, if individual students gain from higher education it is fair that they should also pay some of the costs (Eurydice, 1999). Additional non-monetary personal benefits make the argument even stronger. However, the argument is less concrete in a situation

Table 1
The Private and Social Costs and Benefits
of Higher Education

	Private	Social
Costs	<ul style="list-style-type: none"> • Tuition, fees and study materials • Forgone earnings 	<ul style="list-style-type: none"> • Operating costs of programs • Student support • Forgone national production related to students
Monetary Benefits	<ul style="list-style-type: none"> • Higher productivity and thus higher net earnings • Better job opportunities • Higher savings • Personal and professional mobility 	<ul style="list-style-type: none"> • Higher national productivity • Higher tax revenues • Greater flexibility in labor force • Higher consumption • Less dependency on government
Non-monetary Benefits	<ul style="list-style-type: none"> • Educational enrichment • Better labor conditions • Higher personal status • Higher job satisfaction • Better health and life expectancies • Improved spending decisions • More hobbies and value of leisure activities • Personal development 	<ul style="list-style-type: none"> • Social cohesion, appreciation of social diversity and cultural heritage • Higher social mobility • Lower crime rates • More donations and charity work • Increased capacity to adapt to new technologies • Higher social/political participation

Source: Jongbloed & Vossensteyn, 2002; World Bank, 2002.

of low private rates of return, such as in Denmark, Finland, Norway, and Sweden (Eurydice, 1999).

In addition to the arguments for private investments in higher education, there are three major arguments supporting government subsidization of education: positive externalities, capital market imperfections, and equity considerations (Oosterbeek, 1998).

- Positive externalities from education (shown in Table 1) address education's effects on members of a society other than students. The social rate of return for higher education can be calculated based on the monetary external effects, such

as economic growth and increased tax payments from graduates. Recent studies show that the social rates of return are substantial in developed countries, ranging between 6% and 15% (Blöndal et al., 2002). If we also take into account the non-monetary benefits of higher education (see Table 1) there is a case for substantial public investments in higher education (Geske and Cohn, 1998).

- Capital market imperfections imply that investments in higher education involve risks for students because they are uncertain about their abilities and future jobs. This uncertainty may make it difficult for students to borrow education loans through private banks (Oosterbeek, 1998). Both students and banks may be reluctant to make human capital investments without external subsidies. To prevent an underinvestment in education, governments may intervene, either by guaranteeing bank loans or by offering loans themselves (Barr, 1998).
- The third argument for government subsidization of higher education relates to equity concerns, i.e., redistributions between rich and poor (Barr, 1998). From a lifetime equity position, public subsidies to students seem unfair because they will probably belong to the future group of above-average earners. However, at the moment of attendance it may be argued that public subsidies are needed to equalize entrance opportunities for potential students from different socio-economic backgrounds. Otherwise, students from disadvantaged backgrounds may not enter higher education.

Taken together, the available evidence on the costs and benefits of higher education indicates that it is a shared responsibility between students and society. The next sections of this article review the ways countries deal with situations of fiscal stress by adopting policies to increase higher education efficiency and share the costs between societies and individual students. Within the framework of this article, it is impossible to provide detailed information on every case for each country; instead, multiple examples are given throughout.

Policies to Make Higher Education More Efficient

One public policy option for funding expansion of the higher education system is to determine whether more activities can be done within current budget limits. Will a slight increase in productivity make room for additional activities or can more students be added to existing programs? Could the cost-allocation and task distribution be changed to free up space for additional activities? These types of policy changes can make higher education more efficient. Although efficiency can be defined in many ways, primarily it requires doing more within the existing budget. Two suggestions may help governments increase efficiency in higher education systems. First, they could give higher education institutions greater autonomy and responsibility, al-

lowing them to be more responsive to their customers and environment. Second, they could make higher education institutions and programs more responsible by measuring their performances and deliver public funds accordingly.

The first suggestion requires a change in the steering paradigm. The mode of coordination in many countries is changing from central steering to greater autonomy for higher education institutions. This means that institutions have to rely on more self-regulation within higher education systems, underlining the responsibilities of higher education institutions and students (Jongbloed, 2003a). In practice, this may allow more leeway for market mechanisms to operate within higher education. As a result, higher education institutions and students will feel more strongly, the consequences of the choices they make in financial and other terms.

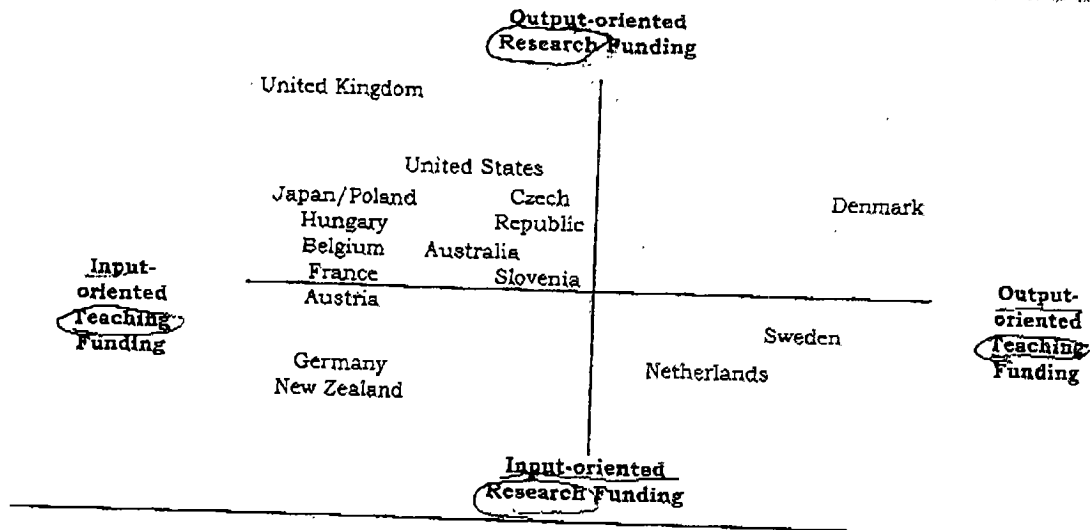
Providing higher education institutions with greater autonomy gives them an incentive to make choices and compete for students. Deregulation could also allow private higher education institutions into higher education markets currently dominated by public institutions, provided they meet certain quality conditions. Private institutions create more competition and increase differentiation. In addition, some countries have been installing new sectors within their higher education systems, e.g., upgrading former upper-secondary (vocational) institutions into higher education institutions, as in Austria and Finland. Deregulation is often believed to lead to more intense competition, generating a strong incentive to raise quality and efficiency. The emphasis on efficiency may stimulate cost reductions, study-progress requirements for students, and well-considered academic choices both for institutions and students.

A second way governments encourage the higher education sector to become more efficient and productive is by integrating performance criteria into the basis for funding higher education institutions and students. The discussion surrounding performance-based funding (budgeting) is already an old one, addressing many advantages and disadvantages (Jongbloed and Vossensteyn, 2001). In practice, the performance orientation within higher education is expressed through integrating output indicators in the funding formula for the allocation of public funds to institutions. For example, teaching tasks can be funded according to their outputs, such as the number of degrees or credits/units conferred. With respect to research, performance funding may include output indicators such as research publications (quantity or quality); the number of doctoral degrees (PhDs) awarded; and the relative share in competitive research funds gained, e.g., through research councils (Jongbloed and Vossensteyn, 2001).

The Figure presents findings about the degree of output orientation in university funding. It provides the relative positions of a number of countries with regard to their performance-

Some countries have been . . . upgrading former upper-secondary (vocational) institutions into higher education institutions.

Figure
The Relative Performance Orientation in University Funding Mechanisms



orientation in funding teaching (the horizontal axis) and research (vertical axis), including the relative importance of competitive research council funding. Generally, most of the countries show more output orientation for research than for teaching. This is due to the share of research council funding, which varies between 7 percent and 30 percent of the universities' grants. The United Kingdom is exceptional in the sense that all core funding for research is highly selective and quality-oriented. The funding of teaching is performance-based in three countries only: Denmark, and to a lesser extent, Sweden and the Netherlands, where university funding is based on the number of awarded degrees or accumulated credits.

Although the role of output indicators in the funding mechanisms is relatively small for most countries, issues of accountability and value for public money seem to have gained attention. Many governments prefer to apply a somewhat soft approach to performance enhancement, relying on other mechanisms instead, such as requiring universities to generate an increasing amount of data on different aspects of their activities. This information will allow the university's various stakeholders to form their opinions on the university's performance and, for instance, allow prospective students to make better-informed choices.

Under this soft approach, the relationship between governments and individual higher education institutions tends to be expressed through performance contracts. Such contracts can include targets for the numbers of students to be taught, numbers of degrees to be delivered, and research outputs to be delivered. But targets can also include a wide variety of issues

such as the quality of teaching and research, development of information and communication technology (ICT), human resources management, the offerings of library facilities, etc. Such an elaborate model is now being developed in Denmark.

Tuition and Fees

Considerable ambiguity still exists in the debate over whether tuition should be charged, and if so, to which students (Eurydice, 1999). Proponents of charging tuition and mandatory fees (hereafter "tuition") argue that the often high private rates of return—that is, personal benefits—of higher education justify private contributions from students through tuition. One could further argue that different tuition rates may emerge for different subjects, disciplines, institutions, or countries because the educational costs and private benefits may vary between programs. In addition, tuition may also function as a market device, stimulating quality in education and guaranteeing that students and governments receive value for their money. Further, many believe that tuition sustains the lifetime equity principle because the prime beneficiaries from higher education pay part of its costs. Finally, it has also been suggested that if students experience some of the costs of higher education through tuition, they will make better enrollment decisions based on their abilities, interests, and aims.

Opponents of charging tuition, however, claim that higher education generates considerable positive externalities that justify high public subsidies. They stress that tuition costs impede access to higher education, particularly by preventing students from disadvantaged backgrounds from enrolling in higher education, which may lead to social exclusion. This equity argument is made frequently in countries where higher education traditionally has been tuition-free. Opponents of tuition also claim that quality and well-considered enrollment decisions can be encouraged in other ways, such as through quality-assurance mechanisms.

The following is a discussion of some of the broad trends in tuition policies.

Introducing Tuition and Increasing Tuition Levels

Regardless of the perceived advantages and disadvantages of tuition, it has been growing more important in many countries (Vossensteyn and Dobson, 1999). A number of countries have introduced or reintroduced tuition in public higher education, including Australia, Austria, Brazil, China, Hungary, Kenya, New Zealand, Tanzania, and the United Kingdom (ICHEFAP, 2003). Australia reintroduced tuition as a part of a package deal in which the government and students had to invest more in higher education. Accompanying the tuition with a deferred income-contingent repayment scheme through tax authorities has proven successful in avoiding problems of access (Vossensteyn and Canton, 2001).

[An] option often used in countries where tuition remains taboo requires students to pay for particular services such as entrance examinations or facilities; continued enrollment after exceeding an accepted duration of coursework; or enrollment in particular programs.

In 1998, the United Kingdom introduced tuition that must be paid by students themselves rather than by the local education authorities (LEAs). So far, the costs do not seem to harm access, but the full replacement of maintenance grants (i.e., grants to cover living and other non-tuition expenses) with loans in 1999 implies another step in the direction of cost-sharing. Opinions about its collective effect on access are divided. In Hungary, tuition was introduced in 1994-95 but abolished again in 1998. In many other cases, the introduction of tuition is presented as a form of cost-sharing that is designed to give the higher education sector some financial relief.

Some governments recently started allowing higher education institutions to enroll a particular proportion of students on a full fee-paying basis. In general, this means students who do not pass the selection procedures for publicly funded higher education institutions can participate in higher education by paying tuition charges. Often they have to meet a minimum entrance examination score. In Australia (since 1998) and Russia (since 2000) universities may admit up to 25% of their total enrollment on a full fee-paying basis, as long as all available publicly funded placements are filled. This is also the case in China (since 1988) and Hungary (since 1997). Institutions in some countries also offer preparatory courses paid for by private funds to train candidates for the entrance examinations, and for "private" bridging courses to compensate for deficiencies. In Hungary, about 40% of total enrollments are in institutions that are "self-financed" (including private higher education).

In other countries—Australia, Canada, Mexico, the Netherlands, Portugal, and the United States—tuition levels have been increasing, often faster than the rate of inflation. India has experienced a slow shift in the direction of greater cost recovery, though at a very modest pace (ICHEFAP, 2003).

Another option, often used in countries where tuition remains taboo, requires students to pay for particular services such as entrance examinations or facilities; continued enrollment after exceeding an accepted duration of coursework (Czech Republic, Germany); or enrollment in particular programs (Egypt).

Some countries opt to charge tuition to part-time students, requiring them to pay for the same services that selected full-time students receive free of charge. This situation will be discussed in more detail later in this article.

Differential Tuition

Differential education costs are particularly an issue in countries with an existing tradition in tuition. The need for differential tuition is often argued from the perspective that it brings more variety and competition into higher education. In the perspective of cost-sharing, it also enables institutions to generate

funds for delivering extra services, such as higher quality teaching.

Differential tuition has a long tradition in the United States, Canada, Korea, the Philippines, and Japan. Higher education in the United States and Canada is a competitive market where the relationships between price, quality, and institutional prestige are very important. In Japan, the private sector is highly competitive, but regarded inferior to the public sector. There, selected public sector students pay moderate tuition (roughly \$2,000 per semester), which varies minimally between national and local universities.

In China, the tuition rates have differed since their general introduction in 1997. Differing rates are based primarily on the quality and popularity of programs as well as their costs. In India, where tuition has been in place for quite some time, the states and the universities set different tuition levels, although formally this is a task of a central government organization (the University Grants Committee).

Australia started differential tuition rates in 1997 when they set three bands (ranges) for tuition based on the costs of study and the expected future income returns for the graduates. New Zealand plans to set a maximum tuition cap to limit the authority of higher education institutions to define their own tuition levels.

In the United Kingdom and the Netherlands, the option of differential fees has become a serious issue of debate. These countries want to allow institutions to distinguish themselves and to collect revenues for offering programs of excellent quality that the government is not willing to fund. In the United Kingdom, a proposal for top-up fees (tuition charges added to the general flat-rate annual tuition level of £1,125) of up to £3,000 per annum was brought to Parliament in the end of 2003.

No Tuition

Still, a large number of countries maintain their traditional principle of "free public higher education," such as Southern, Central, and Eastern Europe; Africa; and Latin America. Denmark, Finland, Norway, and Sweden do not consider tuition an issue because higher education belongs to a social welfare package paid for through high taxation levels. In addition, because of the flat wage structures in these four countries, the private rate of return to higher education is relatively low. Finally, because these students are considered financially independent from their parents, they often have already borrowed substantial loans to cover the relatively high living expenses in these countries.

In Germany and some Central European countries, tuition is an issue. The Germans have debated over tuition for a long time, but despite the sheer need for additional resources in the higher education system, tuition is not permitted for regular full-time students. Nevertheless, students who exceed

Still, a large number of countries maintain their traditional principle of "free public higher education."

a particular duration of study are now required to pay tuition in some German states (Länder). The Czech Republic has a similar situation, although the tuition debate is more recent there.

Ireland, Hungary, and Scotland have moved in the opposite direction. These countries have recently abolished tuition. In 1999, the Scottish government replaced tuition and fees with a graduate tax. The Irish government nullified tuition and fees in 1995. Although they discussed a reintroduction in spring 2003, the lack of compensatory measures for disadvantaged students prevented the plans from being accepted by Parliament. In 1998, Hungary abolished the tuition and fees for regular students that had been introduced only four years earlier in 1994. But today many students enter (public) Hungarian higher education programs for which they have to pay full tuition, particularly in evening courses (Vossensteyn, 2003).

Loans versus Grants

Cost-sharing also can be accomplished by means of student loans in place of grants and scholarships. Because student loans must be repaid, they are often more cost-effective than grants or scholarships from an economic perspective. Through loans, the prime beneficiaries of higher education, rather than general taxpayers, pay part of the costs of study. But loans also include costs, such as administration and interest subsidies, and costs of non-repayment (default). Further, some believe loans harm access for students from disadvantaged backgrounds, whereas grants could potentially help to widen access to higher education by reducing socioeconomic inequalities (Eurydice, 1999).

Grants are direct subsidies to students that do not have to be repaid. They are often used to reduce the costs of education, either for all students or for particular target groups. Offering grants to all students can express national involvement in higher education. However, because public budgets are limited, choices must be made to determine who will receive public subsidies and who will not. Grants are often offered to students from lower-income families to create equal enrollment opportunities and widen access to students from various socioeconomic backgrounds. At the same time, grants can also be directed toward attracting the most capable, high-achieving students to particular programs or institutions. Because the highest-achieving students often come from more affluent families and tend to have the highest future earning potential, it is questionable whether public subsidies should be used for such support (Leslie and Brinkman, 1987).

The following are five major trends in student support, with a major focus on student loans.

Student Loans as a Longstanding Tradition

Student loans have a longstanding tradition in a number of countries, such as Australia, Austria, Canada, the United States,

and several Asian countries. Often, loans form a financial option for students beyond grants, scholarships, and other forms of aid. In many of these countries, the percentage of loans recently has been increasing more rapidly than other forms of aid because increases in tuition and living expenses are primarily in the loan portion of national student aid systems. Though individual cases may differ, on average students get a larger share of their student support by means of loans. The Scandinavian countries have traditionally placed strong emphasis on loan financing because, together with grants, loans are intended to make all students financially independent of their parents.

Introduction of Loans

Because of limited public funds and a growing emphasis on the private returns to higher education, the 1990s have witnessed a trend towards the introduction of student loans in countries where they did not exist before. For example France (1991), Hong Kong (1998), Hungary (2001), Poland (1998), Slovenia (1999), India (2001), Egypt (2002), Kenya (1991), South Africa (1994), and the United Kingdom (1991) have introduced or planned to introduce student loan programs in recent years. In many cases, the loans are offered by public authorities and accompany public tuition policies. France and Slovenia are good examples of countries where loan programs heavily rely on private banks, resulting in repayment conditions that are unattractive to students. As a result, loans are not regarded as important in making higher education more accessible in those countries.

Replacing Grants with Loans

In some countries, such as Canada, the Netherlands, the United Kingdom, and to some extent the United States, student loans have replaced existing grants and scholarships. In the United States, the increasing costs of attending higher education have been offset primarily with loans rather than with scholarships and grants. In the Netherlands, a similar trend is occurring: grants to students have been cut and loan entitlements have been increased. When the United Kingdom added student loans to their system of maintenance grants in 1990, many students borrowed these funds. This success resulted in a partial replacement of the maintenance grants with loans in the mid-1990s. Finally, all maintenance grants were abolished and replaced with loans in 1999. However, a 2003 United Kingdom government white paper suggests reintroducing grants with an obligation for higher education institutions to develop instruments for attracting disadvantaged students (DES, 2003).

In the United States, the increasing costs of attending higher education have been offset primarily with loans rather than with scholarships and grants.

Repayment Options

Student loans vary in terms of target groups and repayment options. Repayment options can include fixed versus flexible repayment periods, fixed versus flexible repayment amounts,

and variations in the amount of interest charged. Such characteristics can heavily influence the attractiveness of these loans.

In many countries, student loans are "conventional loans" in the sense that they have relatively strict repayment conditions, such as a relatively short repayment period, fixed monthly installments, and a high interest rate. However, more flexible repayment options—particularly income-contingent loans—have recently gained attention. With income-contingent loans, graduates repay their debt as a percentage of their income. Graduates repay quickly if their income is relatively high, but more slowly in periods of low income. This type of repayment has been introduced in Australia, Hungary, and South Africa. For example, in Australia and the United Kingdom, the repayments are automatically withdrawn from gross salary through the tax authorities. Nevertheless, income-contingent repayment options have received criticism (Johnstone, 2000). For example, student unions view income-contingent loans with skepticism because they see them as a way to increase costs for students. This happened recently in Canada and the Netherlands (EKOS, 2003; CUNS, 2003).

Willingness to Borrow

While some feel student loans are the fairest way of helping students meet the costs of education (Barr, 1998), establishing a "friendly" student loan system does not guarantee that students will actually accept loans. Reluctance to assume loans is seen in Denmark, the Netherlands, the Philippines, France, Slovenia, and also to some extent the United Kingdom. In a number of countries, the low percentage of students accepting loans can be attributed to strict repayment conditions and future employment and income expectations. But there is also a culture of avoiding debt in some countries, such as in Denmark and the Netherlands (Vossensteyn, 1999).

In many countries, postsecondary students are considered legally or morally dependent on their parents. For example, this applies in some Western European countries (e.g., Austria, Belgium, Germany, Greece, France, Italy, Portugal, Spain and the United Kingdom); in most countries in Central and Eastern Europe; and in Africa, Asia, Latin America, Australia, Canada, and the United States. Due to the increases in education-related costs, including living expenses, the financial burden on parents is growing. This burden is compounded when cost increases are not compensated with increased public student financial support.

In many countries, parents of most students receive indirect assistance toward educational costs in the form of family or tax allowances. But family allowances and tax benefits have also received criticism because it is difficult to define the precise objective of these forms of assistance and because students

Parental Contributions, Indirect Support, and Students' Resources

The Growing Importance of Part-time and Private Higher Education

claim to be financially independent from their parents. Parents do not always pass on the family benefits to their children. In addition, the arrangements are often complex and tax breaks often offer larger benefits to higher-income families.

There are only a few countries that consider students fully or partially financially independent, such as Scandinavian countries and the Netherlands. Often in these countries, parental contributions have continued to grow in importance, either because public expenditures do not keep up with rising study costs, or because student support becomes more loan oriented and parents want to prevent their children from accumulating high debt levels.

Another tendency is for students to seek part-time work to help defray education costs and avoid student loans while affording a higher living standard. Not only are more students taking part-time jobs, they are also working more hours. This tendency is particularly apparent in countries where private and part-time higher education have grown rapidly (Eurydice, 1999; EKOS, 2003, Choy and Berker, 2003).

Part-time Higher Education

Traditionally, part-time higher education has been sought by people who are employed or have children. Now it more often becomes a route through which regular education services can be offered to students who were not admitted to publicly funded full-time study but are willing to pay for their education. This tendency has grown in Central and Eastern Europe, Latin America, and Africa. Poland is an extreme case, where more than 50 percent of its students are enrolled in part-time higher education. In Slovenia (30%) and Hungary (12%) a similar trend is seen, but on a smaller scale (Vossensteyn, 2003). In Ethiopia, 35 percent of students are enrolled in part-time education. In quite a number of cases, professors who teach in public full-time higher education also teach in part-time higher education. Moreover, public university teachers also work in private higher education institutions.

Private Higher Education

The final form of cost-sharing is addressed by the development of private higher education. Many public systems of higher education have insufficient capacity to satisfy the rapidly growing demand for higher education. Private higher education institutions are increasingly being used to help meet the demand for higher education services. In most cases, these private institutions require students to pay cost-covering or even commercial (i.e., profit-making) tuition rates. Hence, students and their parents bear a greater portion of higher education costs. This is particularly true in programs with high expected private monetary returns.

Private institutions traditionally absorb a considerable part of the higher education sector in most Asian countries, Canada, and the United States. Singapore seems to be an exception with a totally public higher education system. In Russia, private and recognized non-state higher education institutions already have a record of attracting considerable numbers of students. In most of these countries, the private school sectors are still expanding.

In many Western European countries, the private higher education sector is traditionally small (Jongbloed and Salerno, 2002). Although many of their programs are officially recognized, they only serve particular professional groups. However, the private sector is beginning to become more active, to expand its activities, and to explore opportunities for public funding.

In Africa and Central and Eastern Europe, private higher education sectors have only recently been established. Because governments have officially recognized limited numbers of private institutions, the establishment and growth of the private sector schools seems to be an important instrument in coping with the increasing demand for higher education (ICHEFAP, 2003; Vossensteyn, 2003).

Recognition and prestige are important factors for private institutions and their programs. In the United States, prestigious and non-status institutions can be either public or private. However, many countries (e.g., Chile, Japan, Brazil, and Portugal) have relatively small selective public higher education systems but extensive private sectors that cater to the majority of students.

Internationalization Internationalization is a final policy area that may relieve some of the fiscal stress in higher education. Within this framework, internationalization can be considered from two opposing viewpoints: exporting and importing students.

A policy of exporting students occurs when a country purposefully sends students to other countries to receive higher education. This is often the case in countries where the national higher education system fails to meet the demands for higher education services. There may be various causes, such as a sudden increase in the demand for higher education or insufficient means to increase or maintain the capacity of their own higher education system. The major reason for exporting students is to gain more highly qualified workers in the long run. Training students often builds relationships between developed and developing- or transition-countries. However, Norway—with its highly developed economy—also has a long tradition of sending large numbers of its students abroad, primarily because it did not have enough training capacity in certain areas (Vossensteyn et al., 2003).

Another aspect of internationalization is the import of foreign students for economic and sociopolitical reasons. In ad-

dition to the belief that students benefit from a multi-national classroom, many countries regard foreign students as a source of short-term and long-term revenue. In the short-term, foreign students pay tuition—sometimes even at a commercial rate—to cover all or a portion of the costs of instruction. In addition, they spend substantial amounts of money for the cost of living and leisure. In the long term, as alumni, foreign students can serve as “ambassadors” in their home countries, particularly when they use their education to move into higher professional ranks. This may help stimulate sociopolitical and economic (business) relationships over time. The United States and the United Kingdom have a long tradition in this area. More recently, Australia has become an international higher education market player, using very direct strategies such as offshore education institutions.

Some Western European countries now follow the example—such as the Netherlands, Germany, and France—but on a much smaller scale. The Germans and French emphasize the long-term socio-political motives, whereas the Dutch aim at filling classrooms with fee-paying students and strengthening the knowledge economy.

Conclusions

Fiscal stress is causing changes in higher education around the world. The increasing demand for higher education services exceeds the capacity the public budgets available for higher education. As a result, governments, higher education institutions, and students and their families must be creative in finding opportunities to finance the costs of study for growing numbers of students. The paper reviewed many policy options to deal with these problems.

A first option is efficiency: doing more with less. By making institutions more efficient and autonomous, higher education can become more competitive. Greater efficiency may free up space for additional students. In addition, institutions and students can become more cost-efficient by focusing financial attention on their outputs (degrees, credits, publications, etc.) when allocating public funds. Although performance-oriented funding mechanisms have been heavily debated, actual practice shows that such funding principles have not yet been adopted on a global scale.

A second option in coping with a situation of fiscal stress is to shift part of the burden of higher education costs from governments to students and their families. This study shows that cost-sharing is occurring on a global scale and in many forms. Tuition, student loans, and parental contributions have gained importance in financing higher education. In addition, private and tuition-based part-time higher education are rapidly growing sectors in many countries. In places where cost-sharing is not an accepted practice, it is likely that this development will occur eventually.

The most important area of debate on cost-sharing is the distribution of costs and benefits between students and governments. This topic requires accurate information on the costs and benefits of education for the different parties involved. It is recommended that the rate of return studies be further developed and receive more attention. The topic also requires a thorough discussion on the distribution of costs and benefits among students from different socioeconomic backgrounds or in various types of programs. All in all, cost-sharing means that more market-like mechanisms are brought into higher education. The most important market drivers are good information on product quality and pricing, and a clear communication of this information.

References

- Barr, N. (1998). *The economics of the welfare state* (3rd ed.), Oxford: Oxford University Press.
- Blöndal, S., Field, S. & Girouard, N. (2002). *Investment in human capital through upper-secondary and tertiary education*. Paris: Organization for Economic Cooperation and Development (OECD).
- Choy, S.P., and Berker A.M. (2003). *How families of low- and middle-income undergraduates pay for college: Full-time dependent students in 1999-2000*. Washington; DC: National Center for Education Statistics (NCES).
- Commissie Uitgangspunten Nieuw Studiefinancieringsstelsel (CUNS). (2003). *Leren investeren; investeren in leren, Een verkenning naar stelsels van studiefinanciering*. Rapport van de Commissie Uitgangspunten Nieuw Studiefinancieringsstelsel, Woerden: Sterprint Grafische Partners.
- Department for Education and Skills (DES). (2003). *The future of higher education*. From the Department for Education and Skills Web site: <http://www.dfes.gov.uk/highereducation/hestategy/>
- Dolton, P.J., Greenaway D., & Vignoles. A. (1997). Whither higher education? An economic perspective for the Dearing Committee of inquiry. *The Economic Journal*, 107, 710-726.
- EKOS Research Associates (2003). *Making ends meet: The 2001-2002 student financial survey*. Montréal: Canada Millennium Scholarship Foundation.
- Eurydice (1999). *Key topics in education. Volume I: Financial support for students in higher education in Europe. Trends and debates*. Brussels: European Commission.
- Geske, T.G., & Cohn, E. (1998). Why is a high school diploma no longer enough?: The economic and social benefits of higher education. In R. Fossey and M. Bateman (Eds.), *Condemning students to debt: College loans and public policy*. New York: Teachers College Press.
- Heller, D.E. (1997). Student price response in higher education: An update to Leslie and Brinkman. *Journal of Higher Education*, 68(6), 624-659.
- Hossler, D., Schmit, J., & Vesper, N. (1999). *Going to college, How social, economic and educational factors influence the decisions students make*, Baltimore: The Johns Hopkins University Press.
- The International Comparative Higher Education Finance and Accessibility Project (ICHEFAP) (2003). Database student/parent cost by country. The International Comparative Higher Education Finance and Accessibility Project, Graduate School of Education, SUNY-Buffalo. Available: <http://www.gse.buffalo.edu/org/inthigheredfinance>.
- Johnstone, D.B. (2000). *Student loans in international perspective: Promises and failures, myths and partial truths*. The International Comparative Higher Education Finance and Accessibility Project, Center for Comparative and Global Studies in Education, Graduate School of Education, State University of New York at Buffalo.

- Johnstone, D.B., & Shroff-Mehta, P. (2000). *Higher education, finance and accessibility: An international comparative examination of tuition and financial assistance policies*. Center for Comparative and Global Studies in Education, Graduate School of Education, University of Buffalo, State University of New York, Buffalo.
- Jongbloed, B.W.A. (2003a). Institutional funding and institutional change, In J. File & L. Goedegebuure (Eds.), *Real-time systems: Reflections on higher education in the Czech Republic, Hungary, Poland and Slovenia*. Center for Higher Education Policy Studies (CHEPS), Brno: VUTUM Press.
- Jongbloed, B.W.A. (2003b). Marketisation in higher education, Clark's triangle and the essential ingredients of markets. *Higher Education Quarterly*, 57(2), 110-135.
- Jongbloed, B.W.A., & Vossensteyn, J.J. (2001). Keeping up performances: An international survey of performance-based funding in higher education. *Journal of Higher Education Policy and Management*, 23(2), 127-145.
- Jongbloed, B.W.A., & Salerno C.S. (2002). *Funding and recognition: A comparative study on funded versus non-funded higher education in eight countries*. Beleidsgerichte studies hoger onderwijs en wetenschappelijk onderzoek, Nr. 92, Den Haag: Sdu Grafisch Bedrijf.
- Jongbloed, B.W.A., & Vossensteyn J. J. (2002). *Financiering masters: argumenten en arrangementen*. Enschede: Center for Higher Education Policy Studies (CHEPS).
- Leslie, L.L., & Brinkman, P.T. (1987). Student price response in higher education. *Journal of Higher Education*, 58, 181-204.
- Organization for Economic Cooperation and Development (OECD). (2001). Investment in human capital through post-compulsory education and training. In *OECD Economic Outlook*, 70, 1-25.
- Oosterbeck, H. (1998). An economic analysis of student financial aid schemes. *European Journal of Education*, 33(1), 21-29.
- Vossensteyn, J.J. (1999). Where in Europe would people like to study? The affordability of higher education in nine Western European countries. *Higher Education*, 37(2), 159-176.
- Vossensteyn, J.J., & Canton, E. (2001). Tuition fees and accessibility: The Australian HECS. In CPB/CHEPS, *Higher education reform: Getting the incentives right*. Center for Higher Education Policy Studies (CHEPS) and Netherlands Bureau for Economic Policy Analysis (CPB), Den Haag: Sdu Uitgevers.
- Vossensteyn, J.J. (1999). *Notitie: 'Studeren en werken' in internationaal perspectief*. CHEPS / Ministerie van Onderwijs, Cultuur en Wetenschappen, Zoetermeer.
- Vossensteyn, J.J. & Dobson, I.R. (1999). Hey big spender! Institutional responsiveness to student demand. In: B.W.A. Jongbloed, P.A.M. Maassen and G. Neave (Eds.), *From the eye of the storm, higher education's changing institutions*, Dordrecht: Kluwer Academic Publishers.
- Vossensteyn, J.J. (2003). Tuition fees and student support; An issue of cost-sharing? In: J. File & L. Goedegebuure (Eds.), *Real-time systems: Reflections on higher education in the Czech Republic, Hungary, Poland and Slovenia*. Center for Higher Education Policy Studies (CHEPS), Brno: VUTUM Press.
- Vossensteyn, J.J., Huisman J., & Van der Wende, M. (2003). *Positioneringinstrumenten, Evaluatie NESO en DELTA*. Enschede: Center for Higher Education Policy Studies (CHEPS).
- World Bank. (2002). *Constructing knowledge societies: new challenges for tertiary education*. Washington, D.C.: Author.