
Cost Sharing in Higher Education: Tuition, Financial Assistance, and Accessibility in a Comparative Perspective

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Abstract: Cost sharing in higher education is the assumption by parents and students of a portion of the costs of higher education – costs that in many nations, at least until recently, have been borne predominantly or even exclusively by governments, or taxpayers. The author presents empirical evidence of, and various theoretical justifications for, increasing cost sharing throughout the world in the forms of tuitions and fees, the diminishing real value of student maintenance grants, and an increasing reliance on private forms of higher education. Resistance to cost sharing, both ideological and strategic, is also analysed. The author discusses policy alternatives such as grants versus loans and the criteria for an appropriate tuition level, as well as the impact of cost sharing on enrolment behaviour. He concludes that increased cost sharing is probably inevitable, less on the basis of the classical neoliberal economic claim for greater equity and efficiency than on the basis of the sheer need for revenue and the increasing priority of alternative claims on public treasuries.

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Cost sharing in higher education refers to a shift in the burden of higher education costs from being borne exclusively or predominately by government, or taxpayers, to being shared with parents and students. This cost sharing, as articulated in Johnstone [1986, 1992, 1993b, 2002, 2003], may take the form of tuition, either being introduced where it did not hitherto exist or being rapidly increased where it already did, or of public institutions charging more nearly break-even, or full, cost fees for room, board, books, and other costs of student living that may formerly have been covered mainly by the government. A shift of the cost burden from the government to student and family may also come in the form of a reduction or even a *freezing* (especially in inflationary times) of student grants. Similarly, it may come in the form of a reduction of the *effective grants* represented by student loan subsidies,

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as interest rates are increased to become closer to the costs of money or market rates. Finally, the shift may come about through public policies that shift enrolments, particularly in rapidly expanding systems, from a heavily subsidised public sector to a much less subsidised, tuition-dependent private sector.¹

In all these ways, and in combinations thereof, albeit unevenly and still ideologically contested, the burden of higher educational costs worldwide is being shifted from governments or taxpayers to students and families.² Thus, we can observe cost sharing entering into the public policies of countries with totally different social-political-economic systems and at totally different stages in their expansion of higher educational participation: e.g. China, Vietnam, the UK and Austria.

In light of this shift, this article explores five questions:

1. What are the theoretical and practical rationales for shifting some portion of the higher educational cost burden from governments and taxpayers to students and families?

2. What are the theoretical, political, ideological, practical, and/or strategic bases for resistance to this shift?

3. What is the impact of increasing cost burdens (mainly tuition and related fees) on student enrolment behaviour – that is, enrolment, persistence to a degree, continuation to a higher degree, and the decision of where or in what kind of higher educational institution to enrol? (In this connection, we will be particularly interested in whether enrolments might be dampened for those whose access is already compromised by (a) low income; (b) racial, ethnic, religious, or linguistic status; (c) gender (most often 'being female'); or (d) isolation – especially from good secondary schools and the cultural enrichment generally associated with urban areas, as well as from institutions of higher education close enough to allow living at home).

4. What is the higher education cost (or more properly *expenditure*) burden currently being borne by the student and family in various countries, and what is the recent increase in these costs borne by students and families as opposed to governments or taxpayers? (This question must consider any offsetting effects of means-tested or otherwise targeted grants and student loans).

5. What policy tools – e.g. need-based grants, loans, loan subsidies, very low or no tuition, subsidised lodging and food – are being employed to increase accessibility, and what is known of their efficacy?

¹ For an extensive collection of papers and studies on cost sharing, see *International Comparative Higher Education Finance and Accessibility Project*: <http://www.gse.buffalo.edu/org/IntHigherEdFinance>.

² 'Taxpayers' includes the general citizen/consumer losing purchasing power to the government via the higher prices brought on by hidden business taxes or through inflation brought about by public deficit financing.

Rationale for cost sharing

The principal causes for or rationales behind this shift are three, and they differ considerably in their underlying economic, political, and ideological assumptions. The first rationale is the sheer need for other than governmental revenue. This need begins with the dramatic increase in most countries in both the public and private demand for higher education, recognised as a major engine of national economic growth and a provider of individual opportunity and prosperity. This demand pressure is a function of the sheer demographic increase in the traditional college-age cohort, compounded by the increasing secondary school completion rates, which in turn increases the number of those wanting to go on to higher education, further compounded by an expansion of what may be considered a college-going age cohort to include adults formerly by-passed by the system. This demand pressure is especially felt in low income countries that are still trying to change from 'elite' to 'mass' tertiary-level participation, at the same time as they are trying to become more economically competitive in an increasingly global economy. But the increase in demand for higher education can also be found in countries already at mass or even near-universal participation rates, as the average student 'consumes' ever increasing amounts of higher or (at least post-secondary) education over his or her lifetime.

However, the institutions delivering higher education are nearly everywhere – and especially in most developing or low-income countries and in those countries in transition from command to market-driven economies – also suffering from a severe and worsening austerity. This austerity is a function of at least three forces. The first is the demand pressure, mentioned just above. The second is the high – and likely to increase – per-student costs on top of the increasing numbers of students.³ Per-student costs in higher education generally rise faster than unit costs in the general economy owing to the traditional resistance on the part of academia (institutions and faculty alike) to measures that would increase productivity by substituting capital for labour or by shedding existing, but lower priority, programmes and their associated labour costs.⁴

³ Specifying (not to mention making international comparisons between) per-student, first-degree, instructional costs is oftentimes unreliable for several reasons including: (1) the difficulty of attributing costs to first degree instruction as opposed, say, to the costs of research or service or advanced instruction; (2) great variability in the accounting treatment of pension and other so-called benefits expenses, in addition to direct salary costs; and (3) a similar variability in the treatment of capital costs within most of the published international data on the comparative costs of higher education.

⁴ The resistance to productivity or efficiency is pervasive in the classical university in most countries, although a kind of 'efficiency' is being forced upon many universities in the forms of mandatory enrolment increases, cuts in faculty numbers, and freezes or even reductions in faculty salaries. The more purposeful enhancement to higher educational productivity – e.g. through the application of instructional technology, or the radical restructuring of instructional styles and faculty workloads – are more likely in entirely new institutions and sectors (such as 'distance learning universities'), but it may be debated whether these forms are genuinely 'more productive' or are better described as 'different albeit cheaper'.

A third cause of increased austerity, especially in the low income and 'transitional' countries, is the decline in available public (taxpayer-based) revenue. This decline, in turn, may be a function either (or both) of an increased difficulty of taxation, or of competition from other, oftentimes more politically compelling, public needs. For example, taxes were relatively easy to collect in centrally controlled economies such as the former Soviet Union and Eastern Europe before the collapse of communism, where purchasing power could be siphoned off at each level of the state-owned production processes via 'turnover', or other forms of value-added taxes. The state could also control – and thus tax – all international trade. Privatisation and globalisation have essentially eliminated these largely invisible and easy-to-collect taxes, and the alternatives – e.g. taxes on income, retail sales, property, and the sales of luxury goods – are visible, unpopular, expensive, relatively easy to avoid, and technically (in addition to politically) difficult to collect. Furthermore, for the limited taxes that can be collected (or the limited deficit financing that the economy can tolerate), higher education increasingly has a lower priority than other public sector needs such as elementary and secondary education, public health, housing and public infrastructure, welfare and the social and economic 'safety net', and internal and external security.

It is in light of these forces and the consequent financial struggles that national systems of higher education and institutions nearly everywhere in the world are having to supplement their governmental revenues, not only with 'cost sharing', as noted above, but also with entrepreneurial activities such as the sale of faculty services, the sale or lease of university facilities, the vigorous pursuit of grants and contracts, and fund raising from alumni, corporations, and friends. Thus, tuition and other fees from students and families have the potential for substantially augmenting the increasingly scarce public revenues. Tuition also has the advantage of doing so without simultaneously adding new costs or diverting faculty from their core teaching responsibilities (as is the case with supplementing revenues via grants and contracts or other forms of faculty entrepreneurship).

The objection that imposing tuition or increasing it at a rapid rate might exclude potential students from poor or rural or otherwise disadvantaged families can be met, it is argued, by the promise of generally available loans (i.e. loans that do not depend on the creditworthiness – and thus the financial worth – of the family), or by means-tested student grants, paid for, at least in part, by the augmented tuition revenue. In fact, the proponents of cost sharing are likely to argue that the alternative to some form of substantial public revenue supplementation is continued or worsening austerity in the public higher education system, the likely result of which would be limitations on enrolment and/or increasingly shabby and underfunded universities. And because the sons and daughters of the wealthy will always have alternatives (in the private sector or higher education abroad), the students, or potential students, who will be hurt most are the very disadvantaged students that the resistance to tuition is supposed to protect.

The second rationale for tuition and other forms of cost sharing, based less on

need or expediency than on principle (however ideologically contested), is the notion of equity: the view that those who benefit should at least share in the costs. The principle is made more vivid and compelling by four observations. The first is that 'free' higher education is actually paid for by all citizens, whether or not they know that they have been taxed (or have had their purchasing power effectively confiscated by inflation brought on by the printing of money). Second, most taxes – public policies to the contrary notwithstanding – are collected through regressive, or at best proportional, taxes on sales, production, or individual incomes that cannot be otherwise hidden (or through the even more regressive governmentally-induced inflation, as mentioned above). Third, a very disproportionate number of the beneficiaries of higher education are from middle, upper middle, and upper income families who could and would pay at least a portion of the costs of instruction if they had to – thus demonstrating the value to them of the higher educational opportunity and signalling the benefits that are thought to be private as opposed to public. Such students and families would probably prefer that much or all of this particular benefit be paid for by the general taxpayer. But whether higher education is subsidised or not – that is, whether tuition is zero, moderate, or high – should make little or no difference in the enrolment behaviour of the students from more affluent families. In this instance, the higher public subsidy required by low or no tuition can be said (at least by the proponents of 'cost sharing') to resemble a transfer payment from the public treasury to middle and upper middle class families. Fourth and finally, to the extent that there are potential students who would be excluded from higher education by the presence of tuition, a portion of the tuition collected can easily (at least in theory) fund the means-tested grants and loan subsidies that can (again, at least in theory) maintain and even enhance accessibility.⁵

A third rationale for cost sharing in higher education is the neoliberal economic notion that tuition – a price, as it were, on a valuable and highly demanded commodity – brings to higher education some of the virtues of the market. The first such virtue is the presumption of greater efficiency: that the payment of some tuition will make students and families more discerning consumers and the universities more cost-conscious providers. The second virtue attributed to the market is producer responsiveness: the assumption that the need to supplement public revenue with tuition, gifts, and grants will make universities more responsive to individual and societal needs. A variation on this theme is directed at the alleged problem of academ-

⁵ Some classic expositions of this equity argument include W. L. Hansen and B. A. Weisbrod, *Benefits, Costs, and Finance of Higher Education* (Chicago: Markham Publishing, 1969); Carnegie Commission on Higher Education, *Higher Education: Who Pays? Who Benefits? Who Should Pay?* (New York: the McGraw Hill Book Co., 1973); J. P. Jallade, "Financing Higher Education: The Equity Aspects," *Comparative Education Review*, June 1978, pp. 309–325; and G. Psacharopoulos and M. Woodhall, *Education for Development* (Oxford: Oxford University Press for The World Bank, 1985); and J. C. Hearn, C. P. Griswold, and G. M. Marine, 'Region, Resources, and Reason: A Contextual Analysis of State Tuition and Student Aid Policies', *Research in Higher Education*, 37 (3), pp. 241–278.

ic malingering – that is, students alleged to be taking more years or more courses (or both) than are necessary or even useful merely or largely because the courses and sometimes even the living expenses are paid for, and because the alternative may be either unemployment or an unappealing job out in the real world. Germany, the Netherlands, and the US have responded in part by eliminating or reducing student aid after insufficient progress toward the degree, and some US states have begun charging higher, out-of-state tuition after so many ‘excess’ credits.

Resistance to cost sharing

All of this is contested ideological ground, and not all policy makers, observers, or stakeholders share the notion that increased cost sharing – that is, a further shift of the cost burden to the student and family – is correct, necessary, or even ‘good expediency’. The shift in the higher educational cost burden from governments and taxpayers to students and families may not be easily accepted, especially in countries with dominant socio-political ideologies that hold higher education to be another social entitlement: to be free, at least for those fortunate enough to make it through the rigorous academic secondary system. This ideology, in turn, can stem from a view that society is the major beneficiary of higher education, and that this observation ought to override the demonstrably high private benefits received by the graduates and their families.

This economic rationale provides good theoretical cover to student, parent, and faculty self-interest in the preservation of low or no tuition. Students, regardless of ideology, tend (understandably enough) to resist the imposition of, or increase in, tuition. Students can be a formidable political force, particularly in leftwing and radical politics, especially in Europe and Latin America and in some countries in Asia. Also, parents of students and would-be students, especially in low-income countries, may be politically powerful elites who just happen to benefit most from the free higher education. This may explain why many students and families, both affluent and low-income, and both ‘left’ and ‘right’ often tend to oppose tuition, while most economists and many political scientists, including those on both the political left and right, tend to approve at least some degree of ‘cost sharing’.

In opposition to efficiency and market responsiveness as rationales for greater cost sharing, many academic leaders assert that a proper higher education is supposed to be removed, or at least substantially insulated, from commercialisation and market forces. According to many academic traditionalists, slavishly following what students think they want, or what politicians or business think they want students to take, is the road to academic mediocrity. Furthermore, there is no evidence, at least in the US, that academic responsiveness, educational quality, or efficiency improves with higher tuition. However, this traditionalist position is increasingly viewed by governments and many citizens as academically self-serving, as well as costly to the taxpayer.

The view that higher education ought to be 'free' or at least very highly subsidised may also be mainly pragmatic and strategic, regardless of ideology or politics. For example, many opponents to the view of cost sharing, as presented above, accept the notion that means-tested financial assistance and loans might in theory preserve accessibility in the face of rising tuition and diminishing taxpayer subsidies to the 'well-off'. However, they claim that children of the poor may not understand that high tuition can be offset with grants and hence might not aspire to a university education during the middle and secondary years, when the absence of such aspiration may effectively preclude the option of any higher education. It is also alleged that children of working class or peasant backgrounds resist borrowing, less from personal economic calculations than from a cultural aversion to debt. Finally, while a policy of high tuition combined with generous means-tested aid might be more efficient, in the sense that the available public subsidies can be more effectively targeted, the high tuition can be imposed by short-term political expediency, while the high aid requires a longer-term ideological commitment – and the result can easily be a de facto policy of 'high tuition-low aid' or 'high tuition-high loans only' [Johnstone 1993a].

Resistance to the shift of costs from governments and taxpayers to students and parents may be based on recognition that scarce taxpayer dollars are allocated by political authorities not necessarily on a rational assessment of the costs and benefits of all competing claims, but on the basis of which claims can muster the greatest political pressure. To *critical* or neo-Marxist opponents of neoliberalism, both the market and the liberal democratic politics prevailing in most of the West mainly perpetuate the existing unequal distribution of power, status, wealth and economic opportunities. A major plank in the critical opposition to higher educational cost sharing and marketisation is the assertion that, contrary to the prevailing neoliberal position, taxes *can* be raised, both substantially and progressively, if there is but the political will and leadership. Doing so, they assert, would obviate the need for tuition and other forms of cost sharing, and would also avoid the danger of losing enrolments (particularly among the poor) and risking failure in possibly ineffective and expensive financial aid and loan schemes [Colclough and Manor 1991; Buchert and King 1995].

In keeping with this strictly strategic resistance to cost sharing, even otherwise staunch neoliberals may worry that increases in tuition may lead neither to more resources for the university, nor to additional need-based aid and greater participation among the hitherto by-passed, nor even to a shift in public resources to other socially worthwhile programmes, but simply to a shift of taxpayer resources from higher education to some other claims that may be more politically forceful, including tax cuts for the wealthy. Thus, it is not necessarily irrational nor irresponsible for stakeholders (even if they are strong believers in most of the typical neoliberal agenda) to advocate for one particular object of public expenditure – say, high subsidies and low or no tuition for higher education – to the exclusion of other public purposes (or tax cuts), which can be assumed to have their own fierce advocates.

However, if the political authorities do not or cannot provide sufficient public revenue to higher education in spite of advocacy for additional tax funds and resistance to tuition (and this is the essential plank of the prevailing neoliberal, cost-sharing advocacy typified by the World Bank), the continuing austerity at some point will become sufficiently damaging – to the point of severe enrolment limitations and increasingly inadequate numbers and/or quality of faculty, books, equipment, and physical plant – that more and more parents, students, university rectors, and faculty will accept the inevitability, and even perhaps the desirability, of cost sharing through tuition and other means.

Cost sharing in higher education

For the reasons cited above, some increased costs borne by parents and students are probably both inevitable and economically rational. The tenets of neoliberal economics seemed to be ascendant in most countries at the close of the twentieth century, including China and much of Eastern and Central Europe, as well as the highly industrialised countries of the West. In the US, UK, and Germany, the embrace of market solutions, privatisation, and fiscal discipline – long the hallmarks of conservative parties – have become central to the political planks of what traditionally had been the parties of the left, particularly when these parties took over their governments in the 1990s. Although public higher education in the US is the province of several states, the 1980s and 1990s saw very great increases in public sector tuition in most states. In 1997, Britain, under a Labour government, broke sharply with the European tradition of free higher education. Germany, at the turn of the century, once again under a Social Democratic government, conspicuously failed in 1999 to reiterate the traditional Higher Education Framework Law guarantee of free higher education to all successful graduates of German academic secondary schools. And in 2001, Austria became the first German-speaking country to adopt tuition.

The supplementation of higher educational revenues by non-governmental sources – primarily students and family – is one of the major recommendations from the World Bank and most other development experts as one important solution to increasingly underfunded and overcrowded universities in the developing world [Johnstone 1991, 1993b; Woodhall 1992; World Bank 1994; Ziderman and Albrecht 1995; Johnstone, Arora, and Experton 1998]. We can see the beginnings of tuition and various kinds of fees in such countries as China, Vietnam, India, and more and more countries in Latin America and Africa. We see the dilemma of Russia, Eastern Europe, and the other countries of the former Soviet Union, all struggling with the need for tuition to supplement increasingly inadequate public revenues for higher education, looking for loopholes in their present constitutional guarantees of free higher education [Bain 1997]. We see a mature, even if uneven, private higher education sector, mainly tuition-supported, in Japan, Korea, the Philippines, Chile, Brazil, and elsewhere in Latin America, and private higher education sectors emerg-

Table 1. Representative College / University Public Sector Tuition (First Degree, Most Recent Available Academic Year, US Dollars)

Country	High Tuition	Low Tuition
Austria	746	746
Canada	5,000	1,366
China	2,591	518
Japan	2,974	2,974
India	85	20
Mexico	1,159	178
Russia	12,026	0
South Africa	3,293	1,085
United States	6,000	1,600
UK	1,565	1,565

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

ing in the countries of the former Soviet Union and the rest of Eastern Europe. Representative public sector tuitions in a number of countries are shown in Table 1.

In the face of the increasing expenses borne by students and parents, national systems and individual institutions face the challenge of maintaining higher educational accessibility, especially for poor, minority, rural, and other traditionally under-served populations. (This challenge is particularly compelling in light of the increasing income disparities being experienced in most of the countries of the world.) In the US and many other countries, the principle of expanding higher educational opportunity and accessibility is being met, among other ways, with means-tested student financial assistance and/or with governmentally guaranteed and generally available student loans (or other forms of delayed payment, such as graduate taxes).

What is most problematic about this shift, at least in the developing world and in the nations of the former Soviet Union and Eastern Europe, is that many of these countries may lack (in addition to a sufficiently affluent middle class that can afford tuition) such beliefs and traditions as:

– A belief in the very appropriateness of tuition: that is, that parents and/or students *should* contribute to the instructional costs of higher education, at least to the limit of their abilities, even in the acknowledged ‘public’ institutions. (Families in many European countries expect to pay for their children’s *living costs*, although not the *instructional costs*, or *tuition* – which is why the ability to attend university and live at home is important, and why higher education is so much more accessible in urban areas. Families in Scandinavia expect their high taxes to assure free higher ed-

ucation, but expect their children – as young independent adults – to bear the costs of living through ubiquitous, subsidised loans.)

– The tradition of revealing incomes and assets, honestly, in response to tax laws or requests for the documentation of financial need for the obtaining of student assistance. (The difficulty of income verification is becoming more of a problem in developing and ‘transitional’ economies with the spread of *private employment*, particularly among the middle and professional classes, where employment has traditionally been mainly governmental, and incomes easy to track.)

– The tradition of philanthropic giving to higher education, which can build up scholarship funds at colleges and universities, public as well as private. (Some cultures have strong traditions of charity, or of giving to religion, but not necessarily to higher education, which is considered either a private good, appropriately affordable to the elite, or the responsibility of the government.)

It is because of these traditions (together with the nearly \$56 billion dollars in student aid and loans, most of it ‘need-sensitive’) that the US, in the face of the very high costs of higher education, both public and private, can still hold to the claim that access to higher education, up to the limits of a student’s ability and interest, need not be precluded by family financial status. Elsewhere, in the absence of these traditions, and of public policies to maintain accessibility, there is reason to believe that higher education will become increasingly unattainable to all but the affluent.

But policies such as means-tested financial aid and generally available student loans at moderate interest rates are financially, politically, technically, and sometimes culturally difficult. For example, ‘financial need’ is exceedingly difficult to ascertain and verify, especially in non-Western countries, where private sector incomes may be neither reported nor even recorded (or certainly under-reported) and where tax evasion is everywhere prevalent [McMahon 1988]. Whatever parental financial responsibility may exist may be limited to sons, or may be handled by extended families. Sections of the population may subsist on largely non-monetary income, making ‘financial need’ even more difficult to assess. Yet without some way of assessing ‘need’, either very large segments of the population must effectively be denied access to higher education, or tuition must be kept at zero or low for all students – which, in the absence of alternative public revenue, would mean that the colleges and universities would either have to limit enrolments (and continue to serve only a small elite), or maintain them at such levels of overcrowding and shabbiness so that all students may be denied a decent higher education.

What is the right tuition?

In response to recognition of the need for, and even the inevitability of, greater cost sharing – which frequently is merely a euphemism for the introduction of or sharp increase in tuition – ministries and higher educational leaders frequently inquire: ‘What is the proper level of tuition?’ They are generally looking for either a mone-

tary amount or a percentage of instructional costs that would be 'appropriate' or at least in some kind of international higher educational mainstream.

But the question of 'a proper tuition' cannot be given any kind of useful answer apart from a context of other policies and contextual circumstances. The principal ones are the following.

1. *The existence of other kinds of non-discretionary 'fees' in addition to tuition.* These 'other-than-tuition' fees may be so-called 'up front' or 'one time' fees, or other mandatory fees for e.g. application, registration, student programmes, athletics and recreation, technology, etc. The state of California was notorious for maintaining very low tuition only because of the very high fees. Japanese universities charge 'application fees' as high as \$350, which for the major private universities can provide in excess of \$15 million in operating revenue with almost no offsetting cost. Indian universities are known for their myriad of small fees.

2. *The per-student costs of the particular higher educational institution or programme in question.* Costs vary substantially across institutions and sectors, and especially across programmes. If cost sharing – generally meaning the charging of tuition – is established by policy as some percentage of per – student instructional expenditures, then it matters greatly in making international comparisons how these per-student costs, or institutional expenditures, are calculated. But these costs depend on assumptions or accounting conventions: for example, how so-called indirect costs, or institution-wide expenditures, are apportioned among first-degree or graduate instruction, or how pension costs, or the costs of health insurance, or the costs of capital are handled. In addition, per-student costs vary considerably among degree programmes in accordance with prevailing faculty-student ratios, equipment needs, and other programme-specific costs – as, for example, among programmes in science, history, or undergraduate teacher education.

3. *The private benefits believed to be attached to certain institutions or certain degree programmes.* Regardless of the underlying instructional cost differences, it is commonly thought appropriate (or perhaps merely expedient, or just more feasible) to recover a higher percentage of these costs from those programmes and degrees believed to bring the greatest private return to the student (or parents) – either in future earning capacity, or in prestige, job security, or anything else valued in a profession or vocation. Thus in the world of private higher education, and in public higher education where tuition is permitted, tuition and associated fees for medical and other advanced health professional programmes are generally high, reflecting not only the greater instructional costs of such education, but the high market value of the degree (in turn reflecting the high income and high status associated with these professions). Also, as much of the world that was formerly dominated by Socialist/Marxist central economic planning has given way to private enterprise and market forces, the demand for higher education in economics, management, law, computer and information science, and the English language has risen greatly – and so, too, has the tuition in such programmes.

The establishment of a 'proper tuition' is made even more complicated by the

interaction and the inter-country variations between the two factors of (1) instructional costs and (2) the mix of public and private benefits. For example, it is conventionally thought that research, or 'classical', universities are more costly per-student than shorter-cycle, more vocationally-oriented, less research-intensive institutions, so that a common percentage of costs to be charged to students and their parents will generally yield a higher tuition in the classical, research university. However, although the presumably higher unit costs of the classical university may be true for medicine, it is probably not true for other programmes, such as law or business, which frequently have higher tuition, but which can be rather inexpensively delivered, at least at the first-degree level.

Higher tuition in the classical university is also reinforced by the notion that there is generally greater prestige – and thus greater private benefits and future income prospects – attached to a degree from a classical university (France, with its *grandes écoles*, being the conspicuous exception). In addition, the university student is more apt to be from a wealthier family, and thus likely to be both willing and able to pay a higher tuition. And if the student is not from a wealthy family, the greater private benefits and income prospects of the student should still be sufficient – in the economically rational world – to support student loans, and thus the payment of the higher tuition.

However, except for medical and related degrees, which continue to be associated with classical universities, most of the programmes that are coming under greatest demand in much of the world – economics, management, computer and information science, law, and the study of the English language – can be taught and learned just as (or more) easily in a non-university context. In fact, it can be argued that it is more likely to be the university student – more than the student at a short cycle non-university institution – who will more likely bring substantial public, as opposed to mainly private, benefits. Under this construction, it would be the *classical* university that needed (or deserved) greater public subsidy (and lower tuition) more than the non-university institution, which is more apt to be creating predominantly private benefits.

4. *The costs of student living* (especially room and board). These expenses are in large part a function of the degree to which it is possible to live at home – which, in turn, is a matter of the proximity of the college or university to the home, the availability of inexpensive transportation, and to some degree the 'culture' of the acceptability or non-acceptability of living with one's parents well into one's twenties. State policies in America, for example, generally aim at putting at least a community college within the commuting range of nearly every family (which in the US generally assumes automobile ownership). Clearly, this is not possible in the rural parts of most countries, where traditional college-going must assume living 'in residence'. But even where living with parents is possible, the general cultural acceptability may vary among countries, with such an arrangement allegedly being more acceptable, for example, in France than in England or Germany.

If the student cannot live at home, the cost of student living is most affected by the degree to which residence halls and/or canteens are publicly subsidised or

**Table 2. Total Higher Education Costs Borne by Students and Parents
(Various Countries, Academic Year 1999–2000, US Dollars)**

Country	Public				Private			
	Tuition and Fees	Room and Board	Other Costs	Total Costs	Tuition and Fees	Food and Board	Other Costs	Total Costs
Australia ¹	3,760 ²	12,100	500	17,480	14,085	8,275	500	22,860
Austria	746	10,150	560	11,455	n.a.	n.a.	n.a.	n.a.
China ³	2,591	5,181	415	8,187	4,145	6,736	518	11,399
Ethiopia	–	400	83	483	1,170	830	190	2,190
France ⁴	656	6,528	993	8,177	11,685	8,450	993	21,128
Germany	203	10,151	505	10,859	n.a.	n.a.	n.a.	n.a.
Hong Kong	5,155	19,151	719	25,025	n.a.	n.a.	n.a.	n.a.
Japan ⁵	3,013	9,205	410	12,628	5,822	9,205	492	15,579
Korea ⁶	7,018	8,676	1,524	17,699	10,136	8,067	1,524	21,264
Mexico ⁷	1,605	7,487	250	9,342	23,173	7,486	535	31,194
Netherlands	1,375	11,300	625	13,300	1,375	10,725	750	12,850
Norway	105	5,221	316	5,642	4,842	5,221	316	10,379
Russia ⁸	–	797	–	797	4,221	4,946	398	9,564
Scotland ⁹	727	8,944	1,527	11,197	n.a.	n.a.	n.a.	n.a.
Singapore	8,858	3,466	227	12,551	n.a.	n.a.	n.a.	n.a.
UK ¹⁰	1,565	8,944	1,526	12,035	n.a.	n.a.	n.a.	n.a.
US ¹¹	6,000	9,000	900	15,900	23,000	10,500	800	34,300

Source: Compiled by the Higher Education Finance and Accessibility Project, SUNY Buffalo Center for Comparative and Global Studies in Education. <http://www.gse.buffalo.edu/org/IntHigherEdFinance>

¹ 2000–2001 charges for the Higher Education Contribution Scheme (HECS), which can be paid upfront with a 25% discount, or deferred and paid after graduation on an income contingent basis at zero real interest – i.e. linked to the prevailing rate of inflation – with the first payment due only after the borrower's annual income reaches a threshold level (A\$22,346 year in summer 2001). Each income range has a repayment rate which increases with the borrower's salary. For fee-paying students, a BA program in 2001 was A\$11,025.

² Band 3 courses including law, medicine, dentistry etc.

³ From 1988–97, China had a 'dual track' tuition system. In 1997, all students began to be charged tuition

⁴ Universities and state *grandes ecoles* estimate of fees only.

⁵ Academic year 1998–99. Tuition at the national universities is determined by the Education Ministry and is uniform throughout the country.

⁶ Academic year 2000–2001.

⁷ The National Autonomous University of Mexico became famous for its students having forced the government to rescind an attempt to raise tuition from the equivalent of about \$.07 to about \$70.00; however, elsewhere in Mexico, most public universities charge a modest tuition.

⁸ Russia continues to guarantee free higher education to students admitted to the limited number of 'government places' on the basis of competitive exams; all others, since 1992, can be charged tuition. Nearly 50 percent of students by 2002 were tuition-paying, contributing more than one-fourth of university revenue.

⁹ Scotland replaced the 'upfront' UK tuition with a mandatory contribution after graduation of L500 to the Scottish University Endowment Fund, repayable by an income contingent loan, the present value of which is about \$727.

¹⁰ The UK first imposed a uniform means-tested tuition in 1997 and has since replaced its once generous maintenance grants with loans.

¹¹ 2000–2001 estimates.

otherwise made accessible at minimum cost. The tradition of institutionally provided residence halls is a legacy of the British collegiate model of higher education, reinforced in those countries where university attendance was assumed to be properly free of any student or family-financial responsibility. But these residence halls can be spartan and crowded, as in China, where very low charges might even cover the very minimal real costs – or quite opulent, as in many US college and university dormitories, with air conditioning, private bedrooms, and extensive ‘common spaces’, in addition to the absence of any governmental subsidy, all of which can make living in a university dormitory in an urban area frequently *more* expensive than in surrounding low-cost, unsubsidised private housing. Table 2 shows the total combined expenses borne by students and parents for selected countries.

5. *Parental willingness to pay.* The willingness to make financial contributions (even sacrifices) to support the children’s higher education may be a function of *culture* as well as *affluence*. This is not intended to ascribe special nobility to those cultures where parents typically make large sacrifices on behalf of their children’s higher education. But the Swedish parent, for example, has become accustomed to paying very heavy taxes, but then enjoying the benefit of ‘free’ university education for their children, as well as the Scandinavian convention of students paying for their living costs through subsidised student loans; the imposition of tuition charges in Sweden could well be resisted, even by parents who by most measures could well afford the tuition. In contrast, the Chinese parent, who probably has only one child to begin with, and who has probably always placed a very high value on education (or else the child would not likely be in a position even to contemplate higher education), is apparently willing to make considerable personal financial sacrifices for their child to go to a university.⁶

Parents may be thought to be more willing to pay in countries with substantial private education, where people are more used to paying for the higher (and sometimes the secondary) education of their children. This seems to be the case in the US, where tuition at private colleges and universities may be in excess of \$20,000 a year, and total expenses well in excess of \$30,000, and where undergraduate residential tuition in the more expensive public universities can now be \$4–5000 or more (having been rising more steeply than those in the private sector), and where total expenses in the public sector can easily reach \$15,000 a year. However, the expected correlation of public and private sector tuition does not hold in international comparative analysis. Japan, Brazil, India, Korea, the Philippines, and other countries with established private higher education sectors still feature low or no-cost public classical universities. Furthermore, efforts to increase tuition in the public sector – even modestly, and even in light of the pronounced middle and upper income profiles of these advantaged student bodies – seem still to be met

⁶ This observation was confirmed by conversations the author had with parents waiting outside the higher education entrance examination sites in Wuhan and Chongqing in the summer of 1999, with Professor Shen Hong of Huazhong University.

with intense political opposition (as in the total shut down of the National Autonomous University of Mexico for most of 1999 over a government proposal to raise tuition from a few cents to approximately \$70 per semester).

In America, parents have always faced a quite precisely calculated 'expected family contribution' (EFC). But a realistic *expected family contribution* cannot be derived simply from some *ex ante* rule of what parents at various income levels *ought* to pay, but from what they seem in fact willing to pay at a particular time in a particular culture. The EFC in the US has actually diminished in recent years. Some would say that this diminution reflects a growing middle class hedonism; others would say that the US Congress has pandered to middle and upper middle class tuition anxiety by legislatively excluding most of the EFC that used to stem from parental assets, principally home equity. The US case is further complicated by the large number of students from single parent homes where 'parental financial responsibility' is difficult to determine or enforce. Also, there are very many students in America who are both financially needy and academically marginal and otherwise ambivalent about higher education, but who have places in the open admission sectors of American higher education. Such students may say that they would decline to enrol or would drop out in the event of a large tuition increase. Or, they may attribute their dropping out to 'financial factors', but this may also be the most socially acceptable reason to profess – more so, for example, than factors like academic difficulty, boredom, loss of interest, or their parents' unwillingness to pay what other similarly-situated parents might pay willingly. In short, parental willingness to pay, like student willingness to incur indebtedness, is probably substantially culturally determined, and may further differ by social class or family income – but with the true effect of the strictly financial factors associated with cost sharing being embedded within other factors and difficult to identify precisely.

6. *Possibilities for student summertime and term-time employment.* Working one's way through college is part of the American myth – and is still substantially true [Stern and Nakata, 1991]. The US student who claims 'financial need' is expected to earn and save at least \$1500 during the summers. He or she is also expected to hold down a part-time job, generally about 10 hours a week, for approximately \$2000. However, many American students hold jobs requiring from 20 to 40 hours a week – all the while supposedly enrolled as 'full time' (although in fact frequently taking more than the standard four years to complete a degree). But the ability of student summer and term-time employment to contribute substantially toward cost sharing is a function of at least four factors that may be especially prevalent in the US: (1) a culture of acceptance – even expectation – of part-time youth employment, even among affluent families where such employment is not essential to the family's financial well being; (2) a generally robust economy with an abundance of part-time, unskilled, low-paying but readily available jobs; (3) the encouragement and financial assistance of the Federal Work-Study Program, which partially subsidises college and some community jobs for needy students; and (4) collegiate standards (low compared to most countries) and an academic calendar (including extensive

evening classes) that allows and even encourages part-time study and 'stopping out'. Taken together, these economic, cultural, and structural features combine to allow substantial cost sharing by the student from part-time and summer employment. However, these features may be largely absent in many countries, and seem to be especially absent in those countries that are experiencing the greatest need to supplement governmental revenue. But the non-availability of student employment then puts more pressure on grants and loans – to which we next turn.

7. *The general availability and sufficiency of 'need-based' or 'means-tested' grants and subsidised loans.* In theory, a 'need-based' grant, increasingly in conjunction with a student loan, substitutes for the missing parental contribution from the low-income family. By 'generally available', we mean that a student otherwise interested in and admissible to higher or post-secondary education would be entitled to a grant or subsidised loan because of his or her family's low income, or similarly would not be precluded from borrowing by the absence of family collateral or creditworthy parents. Grants and loans not generally available are by definition *rationed*, usually by criteria of academic merit or preparedness, having nothing to do with the ability of the family to provide financial support. The US Pell grants, the former British mandatory grants, the French *bourse sociale*, and the German BAföG, are examples of governmentally-provided student financial assistance to which a student is entitled simply by being accepted to a university, being from a low income family, and generally maintaining some minimum academic standard or progress toward the degree. Because academic merit or preparedness, at least as conventionally measured, is strongly correlated with socio-economic status, the more 'merit' figures into the awarding of grants and subsidised loans – much of which (to the upper-middle class) is likely to have little or no impact on the student's enrolment decision – the less there is likely to be available for low-income students, and the more the imposition of tuition is thus likely to be a barrier to higher educational participation.

'Sufficiency' refers to the ability of the need-based grant or loan subsidies to truly compensate for the low income of the family. 'Sufficiency' is a function of the maximum grant or loan subsidy (i.e. the amount to which the children of the lowest income families would be entitled) and the degree to which that amount can truly compensate for the unavailability of parental contributions. In its most generous formulation, a grant-loan combination is 'sufficient' to the degree to which it can bring within financial reach of the lowest income family the best higher education to which the student would be otherwise entitled. In its minimum formulation, a grant-loan combination might be deemed 'sufficient' if it at least brought the least expensive higher educational alternative (probably a short cycle, non-university form) within reach of those students able to live at home and perhaps also work part time (or even full time) and attend college only part time.

'Sufficiency' is also a function of the relationship of the grant (or the grant/loan combination) to varying family incomes. This relationship is established by the (low income) point at which the maximum grant begins to be diminished (under the expectation that the family can now begin contributing at least something) and the rate

Table 3. Range of College and University Costs Borne by Students and Parents (First Degree Various Countries, Academic Year 1999–2000, national currency and US Dollars)

Country	Public		Private	
	High Estimate	Low Estimate	High Estimate	Low Estimate
Australia ¹	A\$22,910 [\$17,480]	A\$9,445 [\$7,215]	A\$29,950 [\$22,860]	A\$15,784 [\$12,040]
Austria ²	ATS153,500 [\$11,455]	ATS46,000 [\$3,433]	Not applicable	Not applicable
China	A15,800 [\$8,187]	A4,300 [\$2,228]	A22,000 [\$11,399]	A7,500 [\$3,886]
Ethiopia	Birr 725 [\$483]	Birr 50 [\$33]	Not applicable	Birr 3,275 [\$2,190]
France	Ffr. 54,211 [\$8,177]	Ffr. 27,562 [\$4,157]	Ffr. 140,080 [\$21,128]	Ffr. 76,638 [\$11,559]
Germany	DM21,502 [\$10,859]	DM8,481 [\$4,283]	Not applicable	Not applicable
Hong Kong	HK\$208,704 [\$25,025]	HK\$85,496 [\$10,251]	Not applicable	Not applicable
Japan ³	A2,341,500 [\$14,500]	A1,356,800 [\$8,427]	A3,057,790 [\$18,992]	A1,813,650 [\$11,265]
Korea ⁴	W11,611,000 [\$17,699]	W2,611,000 [\$3,980]	W13,949,000 [\$21,264]	W5,868,000 [\$8,945]
Mexico	MNP52,650 (\$9,385)	MNP8,600 (\$1,533)	MNP175,000 (\$31,194)	MNP90,000 (\$16,045)
Netherlands ⁵	NLG26,600 [\$13,300]	NLG14,100 [\$7,050]	NLG25,700 [\$12,850]	Not applicable
Norway	Nok53,600 [\$5,642]	Nok17,450 [\$1,837]	Nok98,600 (\$10,379)	Nok69,100 (\$7,274)
Russia	R259,980 [\$18,142]	R12,859 [\$898]	R137,045 [\$9,564]	R46,456 [\$3,242]
Scotland	£7,334 [\$11,197]	£3,490 [\$5,328]	Not applicable	Not applicable
Singapore	S\$22,090 [\$12,551]	S\$4,540 [\$2,580]	Not applicable	Not applicable
United Kingdom	£9,625 [\$14,694]	£3,014 [\$4,601]	Not applicable	Not applicable
United States ⁶	\$15,900	\$6,900	\$34,300	\$24,000

Source: *Information from the Higher Education Finance and Accessibility Project, SUNY Buffalo Center for Comparative and Global Studies in Education.*
<http://www.gse.buffalo.edu/org/IntHigherEdFinance>

¹ 2000–2001.

² 2001–2002.

³ Academic year 1998–99. Tuition at the national universities is determined by the Education Ministry and is uniform throughout the country.

⁴ Academic year 2000–2001.

⁵ Academic year 1999–2000.

⁶ 2000–2001 tuition estimates.

at which further increments to family income are effectively 'taxed' through higher expected family contributions and further reductions in the need-based grant. Obviously, the more generally available the grant (that is, the more it is based on income alone, without further rationing by some measure of 'merit'), and the more sufficient the grant (that is, the more generous the grant, or the grant/loan combination, in making possible the most costly alternative to which the student would be academically entitled), and the more realistic the expected parental contribution (in the sense of phasing out the grant and phasing in the expected contribution at a level and rate that most families are able to meet), the more the need-based grant-loan system will be able to compensate for enrolment-limiting effects of tuition.

In summary, in order to answer the question of what tuition should be – or what the total expense burden borne by the student and family should be – a consideration of all of these factors is required. One can expect to find a very considerable expense burden – in the range of US\$ 20,000–30,000 – in the presence of very high tuition, as in the case of a high quality private higher education with little or no public support of basic instructional costs, and no 'price discounts' or grant assistance, and living away from home in conditions not unlike one's employed, non-student-age peers. The lowest financial burdens upon students and parents may be found in some combination of low or zero tuition⁷ and the opportunity to live at home. Many countries, as shown in Table 3, have a considerable range of total costs/expenses borne by the student and parent *before financial assistance in the form of either grants or loans*.

Grants versus loans

In so far as financial assistance is to compensate for low family income and bring higher education within reach of any student of requisite ability, regardless of his or her family's income, either grants (non-repayable) or loans (repayable by the student, parent, business enterprise, or taxpayer) should suffice – providing that students are willing to borrow, and that banks or other savings institutions are willing to lend to them. Students would presumably always prefer that their assistance be non-repayable – that is, in the form of grants, in addition to no or very low tuition, subsidised room and board, and strongly subsidised loans that are really 'near grants'. However, in so far as the rationale for the combination of tuition, unsubsidised student living arrangements, and accompanying student financial assistance is avowedly to shift costs from governments and taxpayers to students and parents, then the more this student assistance can take the form of a 'true' (that is, unsubsidised or minimally subsidised) loan, the more effectively all of the rationales dis-

⁷ Very low tuition is sometimes equated with 'public' higher education, but there can in theory be publicly-owned and privately-owned institutions with high or low tuition, depending partly on the underlying instructional costs, but mainly on the degree of public subsidisation of these underlying costs.

cussed earlier can be met. That is, it is loans (or other versions of deferred payments, like graduate taxes) more than governmentally provided grants that:

1. relieve the government, and thus the public sector generally, of some of the burden of the high and rising costs of higher education and (at least theoretically) provide more revenue to the university;

2. promote equity by allowing the costs of higher education to be shared between the public, reflecting the not inconsiderable public benefits of higher education, and the family, reflecting the also considerable private benefits to both the student and the family;

3. engage the forces of the market to enhance both the efficiency and the responsiveness of the university.

However, in order to relieve the public treasury and truly shift the cost burden to the student and parent, the loans must be repaid – and at something at least near the generally prevailing rate of interest. This is as true for ‘contingent repayment’ or ‘income contingent’ loans, such as those employed in Sweden and available in the US, as for conventional ‘mortgage type’ loans [Johnstone 1972, 1986; Woodhall, 1988, 1989; Ziderman and Albrecht 1995]. It is also true of other forms of deferred payment where the student presumably bears a share of the higher educational cost burden, but only repays in the future, over time, and only as long as he or she is gainfully employed. Such repayment schemes include the so-called graduate tax (often advocated, but never fully implemented; see Barr, 1989), the ‘income surtax’ repayment employed in Australia through the Higher Education Contribution Scheme (HECS), and the ‘drawdown’ of governmental pension payments employed in Ghana to repay the student loan fund. In all of these repayment schemes, the present discounted value of the stream of future payments (or of income surtax payments, or of foregone pension fund contributions) must equal the original value of the loan, or of any forgiven tuition, for the cost burden truly to have been shifted to the student. To the extent that loan repayments are ‘lost’ through high defaults, lost tax records, emigration or simple disappearance, subsidised interest rates, or excessively high governmentally-borne costs of collection and servicing, the loan does not really shift the costs, and can be more accurately characterised as a ‘near’ or ‘effective’ grant – and generally a rather inefficient and politically costly one at that!

Access and participation: cost sharing and enrolment behaviour

Countries differ in the percentage of the traditional tertiary education age cohort that actually goes on to various forms of higher or post-secondary education. Since there are substantially differing private benefits attached to these different forms, it ‘matters’, for example, whether students choose, are able to elect, are tracked into, or are restricted from:

- any tertiary level education;
- only a short-cycle, minimum status, non-selective form of post-secondary education;

- a selective, prestigious, classical university;
- or even beyond, to the most selective and prestigious university programmes, such as medicine or law or advanced study toward a Ph.D.

Clearly, there are fewer and fewer students at the more advanced and selective end of this higher educational pipeline. That is, some students are somehow selected or otherwise admitted into – while others are somehow screened or selected out of – the more advanced, remunerative, and ‘selective’ levels or stages of higher education. The question most commonly identified with higher education’s ‘accessibility’ is the degree to which this selection, ‘screening’, or ‘narrowing of the pipeline’ is a function of factors considered in most societies and cultures to be politically or ideologically acceptable or unacceptable. The principal ‘acceptable’ factors, or correlates, would be genuinely innate intelligence or talent, or interest (especially interest that is itself a function more of something innate than of environment or culture).

Factors generally considered ‘unacceptable’ – and therefore, if possible, have their association with ‘access’ lessened by policy – would be, for example: (a) low income or low social status of the parents; (b) region (especially being from a rural or remote area); (c) race, religion, or ethnicity; or (d) gender (although this may be a more culturally contested correlate).

In this construction, then, higher educational accessibility may be seen as a policy goal, more or less common to most countries, realised to the degree to which the principal correlates with higher educational participation – as well as to participation within the more prestigious or selective forms or levels of higher education – are mainly interest, ability, and talent, and conversely are not family income or status, race or ethnicity, gender, or region or rural/urban location.

There exists in virtually all countries a substantial underlying association between low higher educational participation and the above-mentioned unacceptable correlates, particularly family income and status, race and ethnicity, rural or remote location, and at least in many developing countries, gender. The true causation that diminishes the probability of higher educational participation may be subtle and complex, and may have done its work long before the end of secondary schooling, when more fortunate young people and their parents are making decisions to partake of higher education. High income-high status families are apt to place more emphasis early in a child’s life on education. They are likely to have more books in the house, to take more of an interest in their children’s education, and to be able to afford (or live where there exist) better middle and secondary schools – all in order to better prepare their children for university entrance. In most countries, the correlation between higher educational participation with family income, status, and other ‘unacceptable correlates’⁸ is well established before the completion of secondary school. Therefore, a reasonable goal for cost sharing might be to be able

⁸ Daniel Levy has observed that these correlates, however ‘unacceptable’, are nonetheless virtually unavoidable; thus ‘lamentable’ might be a more useful descriptor.

to pass some element of costs on to students and parents without further accentuating the 'unacceptable correlates' to higher educational participation of high family income, urban location, and dominant ethnicity or language.

Accordingly, an investigation of the connection between cost sharing and accessibility must examine the effect that greater higher educational costs passed on to students and families (probably in the form of higher tuition, or the implementation of tuition where it did not previously exist, or the reduction of student living subsidies) have on:

- the decision to apply to and matriculate in any institution of higher education;
- the decision to apply to or matriculate in a particular form (for example, a university or a less selective non-university) or a particular programme (for example, medicine, law, engineering, or humanities) in higher or post-secondary education;
- the likelihood of degree completion;
- the likelihood of going on to more advanced (and more prestigious and/or remunerative) levels of higher education.

The empirical research on the effect of both tuition and need-based financial assistance on student enrolment behaviour is mainly econometric analyses – either cross-sectional or time series – of enrolment and persistence of US students in response to differing state tuition policies [Leslie and Brinkman 1989; Kane 1995; Heller 1999]. This research supports the conventional wisdom that net price – that is, the combined effect of tuition discounted by financial aid – has little effect on middle and upper-middle income students. However, it can have a measurably discouraging impact on low-income youth, an impact that is only partly offset by increasing need-based aid.

Significantly, there are factors in the US that may serve to blunt the impact of rising tuition on enrolment behaviour, or at least diminish the likelihood that the effect will be an outright denial of accessibility.⁹ Among these factors are:

- the very great number of open-access two year colleges within commuting range of most US homes, successful completion of which (even partial completion, or passing only several courses) is generally transferable, or applicable toward a four-year degree;
- a similar widespread availability of many virtually open-admission four-year colleges, both public and private;
- the peculiarly American 'degree-by-credit-accumulation', or 'modular' system that makes possible easy 'stopping out' (for example, to earn and save money), or transfer from an expensive residential college to a less expensive alternative within the commuting range from home;

⁹ Interestingly, the very openness and already very high participation in US higher education may, other things being equal, actually accentuate the dampening effect of tuition increases on higher educational participation because of the large numbers of students who are essentially ambivalent about their higher education, and who may be 'trying it out' as long as the debt loads or the burdens on the parents are not too great.

- an economy with abundant part-time employment possibilities;
- the general availability of need-based grants and student (without any test of either student or family credit).

The effect of these factors is to cushion the impact of increasing tuition, and to present alternatives to not matriculating at all, or to dropping out altogether, in response to an increase in the cost to be borne by the student or family. It is in countries where such factors do not exist – that is, where the two-year alternative is not transferable to a four-year or advanced degree, or where there are no easily accessible higher educational alternatives within commuting range from home, or no generally available student loans, or no practical part-time student employment opportunities – that a sharp rise in tuition or other expenses borne by the student or parent can be assumed to be more likely to preclude higher educational participation altogether.

In the end, we know very little still about the impact on higher educational accessibility of the increasing shift of higher educational costs, worldwide, from governments and taxpayers to student and parents. We know that the shift is happening, and we know that most governments officially espouse a concern for the maintenance (or probably the enhancement) of higher educational accessibility. What we do not know, at least not yet from systematic empirical study, is the impact on university enrolment behaviour (or higher educational participation generally) of increasing cost sharing. Nor, even more importantly, do we know from empirical study the ameliorative efficacy of the common access policies such as means tested grants, loans, or enhanced student employment opportunities.

The worldwide trend toward some greater cost sharing – i.e. increasing tuition and diminishing levels of public subsidies, at least to non-needy students – seems inevitable. The inevitability does not reflect any triumph of World Bank policies, nor of market capitalism, and would not necessarily be the preference of many thoughtful analysts who believe in markets but who also see many problems in the increasing privatisation of higher education. But there seems to be no escape from the conclusions that: (1) higher education in the future will need vast additional resources, particularly in the developing countries; and (2) the only alternative to more of the burden being shifted to parents and students is for there to be very large increases in taxes, progressively raised.

Herein lie the two problems that above all undergird the likelihood of a continued shift of higher-education costs from governments and taxpayers to students and parents. The first is that substantial increases in progressive taxes – that is, taxes that fall proportionately more heavily on the rich, and thus are levied mainly on income and wealth – are exceedingly difficult to collect (mainly because they are so easy to escape). The second problem with relying on massive tax increases (progressive or otherwise) to avoid the need for greater higher-education cost sharing is that higher education is simply not at the front of the queue, even if taxes were to be significantly and successfully increased. Elementary and secondary education, public health and sanitation, environmental restoration and preservation, housing and other public infrastructure, and a social safety net for the elderly, the unem-

ployed and the unemployable are almost certainly ahead of higher education in most countries. Without some additional cost sharing, it is almost certain that enrolments will be restricted, and/or the higher education that is available to the masses and still 'free' will be of increasingly lower quality.

Higher education needs to continue to claim public resources – and more of them. But it also seems incumbent on those who can influence public policy to work toward the construction of less costly forms of higher education and also toward the kinds of financial assistance and loan programs that can combine significant cost recovery with protection to those whose participation in higher education is most at risk from the inevitable need to share in the costs.

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