

WORLDWIDE TRENDS IN FINANCING HIGHER EDUCATION: A CONCEPTUAL FRAMEWORK

TENDENCIAS MUNDIALES SOBRE EL FINANCIAMIENTO EN LA EDUCACIÓN SUPERIOR

TENDÊNCIAS MUNDIAIS SOBRE O FINANCIAMENTO NA EDUCAÇÃO SUPERIOR

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Abstract

The financing of higher education throughout the world has seen dramatic changes in the last decades of the 20th and the first decade of the 21st centuries. In the main, these changes in financing are responses to a worldwide phenomenon of higher educational costs tending to rise at rates considerably in excess of the corresponding rates of increase of available revenues, especially those revenues that are dependent on taxation. The consequence in most of the world has been a shortage of revenue to accommodate both the increasing costs of instruction and research as well as (and exacerbated by) the increasing revenue needs of rising enrollments. These diverging trajectories—of very rapidly increasing resource needs and more static or even faltering revenues from state budgets—must, in turn, be met by solutions either (or both) on the cost side or on the revenue side. The present paper attempts to provide a conceptual framework for worldwide trends in the financing of higher education and the dominant solutions to cost-revenue squeezes.

Keywords: financing higher education. shortage of revenues, rising costs of higher education, divergent trajectories

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Resumen

El financiamiento de la educación superior en todo el mundo ha visto cambios dramáticos en las décadas finales del siglo XX y en la primera del siglo XXI. En general, estos cambios son respuestas a un fenómeno mundial en que los costos de la educación superior tienden a elevarse considerablemente en exceso de las tasas correspondientes de aumento de los recursos disponibles, especialmente los ingresos que dependen de los impuestos. La consecuencia en la mayor parte del mundo ha sido una escasez de ingresos para acomodar los costos crecientes de la instrucción y la investigación al igual que (y exacerbados por) las necesidades crecientes de recursos por las matrículas en aumento. Estas trayectorias divergentes –de necesidades de recursos en rápido aumento y de ingresos más estáticos o inclusive faltantes de los presupuestos estatales –deben, a su vez, ser enfrentados por soluciones ya sea en el lado del costo o en el del ingreso (o ambos). Este trabajo intenta proporcionar un marco conceptual para las tendencias mundiales de la educación superior y las soluciones dominantes a las contracciones de costos-ingresos.

Palabras claves: financiamiento de la educación superior, escasez de ingresos, costos crecientes de la educación superior, trayectorias divergentes.

Resumo

O financiamento da Educação Superior em todo o mundo passou por mudanças dramáticas nas últimas décadas do século XX e na primeira década do século XXI. Em geral, estas mudanças são respostas a um fenômeno mundial no qual os custos da Educação Superior tendem a aumentar consideravelmente em excesso das taxas correspondentes de aumento dos recursos disponíveis, especialmente os ingressos financeiros que dependem dos impostos. A consequência na maior parte do mundo tem sido uma escassez de recursos para acomodar os custos crescentes da instrução e da pesquisa da mesma forma que (e exacerbados pelas) as necessidades crescentes de verbas pelas matrículas em aumento. Estas trajetórias divergentes – de necessidades de recursos em rápido aumento e de ingressos mais estáticos ou inclusive que faltam nos orçamentos estatais – devem, por sua vez, ser enfrentados com soluções, seja no lado do custo ou no do ingresso de verba (ou em ambos). Este trabalho tenta proporcionar um marco conceitual para as tendências mundiais da Educação Superior e as soluções dominantes para as contrações de custos-ingressos financeiros.

Palavras-chaves: financiamento da Educação Superior, escassez de verbas, aumento de custos da Educação Superior, trajetórias divergentes.

The financing of higher education throughout the world has seen dramatic changes in the last decades of the 20th and the first decade of the 21st centuries.¹ In the main, these changes in financing are responses to a worldwide phenomenon of higher educational costs tending to rise at rates considerably in excess of the corresponding rates of increase of available revenues, especially those revenues that are dependent on taxation. The consequence in most of the world has been a shortage of revenue to accommodate both the increasing costs of instruction and research as well as (and exacerbated by) the increasing revenue needs of rising enrollments. These diverging trajectories—of very rapidly increasing resource needs and more static or even faltering revenues from state budgets—must, in turn, be met by solutions either (or both) on the cost side or on the revenue side. The cost-revenue squeeze itself as well as some of the so-called *solutions* thereto can have a deleterious impact on both quality and capacity of universities and other institutions of postsecondary education and thus on the goal in virtually all countries to expand higher educational participation and accessibility. As the chapters in this book examine the link between higher education finance and access, this introductory chapter attempts to provide a conceptual framework for that examination in the identification of worldwide trends in the financing of higher education and the dominant solutions to the above mentioned cost-revenue squeeze.

Trends in Financing Higher Education

Six trends in the latter years of the 20th and early years of the 21st centuries—each with economic, political, and social roots and consequences—are noteworthy for their impacts on the financing of higher education and in turn of higher educational participation and accessibility. These trends, while varying both among countries and within each country, form the context for higher education's currently widespread financial austerity as well as for the emerging policy solutions which, while again varying both among and within countries, exhibit some very similar patterns. In summary, these trends are:

1. Increasing unit, or per-student, costs of instruction.
2. Increasing enrollments.
 - 1 The increasingly knowledge-based economies and the consequent additional expectations upon higher education as a major engine of economic development and individual betterment.
 - 2 The failure of governmental, or public, revenues to maintain their *share* of the cost increases resulting from the aforementioned pressures on higher educational expenditures.
 - 3 Increasing globalization (which contributes both to the increasing cost trajectories and to the faltering governmental revenues).
 - 4 Increasing liberalization of economies and the resulting decentralization, devolution, and privatization of public and private systems and institutions of higher education.

¹ We will use the term *higher education* to designate institutions of postsecondary education broadly: in the parlance of UNESCO's International Classification of Education, ISCED Levels 4A, 5, and 6.

We will look first at each of these trends, after which we will examine the dominant consequence—which is an increasing higher educational austerity—and conclude with an examination of some current policy solutions.

Increasing Unit, or Per-Student, Costs of Instruction

The fundamental financial problem of higher education all over the world, and the reason that even wealthy institutions can feel the pinch of austerity, begins with the fact that universities face a *trajectory* of annual cost increases, the natural and quite appropriate rate of increase of which is the rate of increase of their wages and salaries, which in turn tends to track the rate of increase of wages and salaries in the general economy—or, if there is any real growth in the economy, at *inflation plus*. This is the so-called *cost disease*, or the phenomenon of the *rising relative* unit costs in the labor intensive, productivity immune (or at least productivity resistant), sectors of the economy—which include symphony orchestras, schools, and universities, and which phenomenon was first articulated by Baumol and Bowen (1966). Accelerating this natural rate of unit (or per-student) cost increase are other factors peculiar to many universities that further accelerate annual cost increases in varying degrees in different countries, depending mostly on available revenues:

- technology, which in higher education tends not to lower costs by substituting capital for labor and driving down unit costs as it does in most of the private, for-profit, goods-producing sectors, but to increase costs—supposedly altering the very nature and improving the value of the product, but still requiring more, not less, revenue;
- constant change as new programs are added (almost always faster than old ones—and their faculty and staff—can be shed); and
- the already high and rapidly increasing costs of research, especially in the physical and biomedical sciences with their high technology expenses, and especially where faculty and administrative ambition are content not simply with a constant share of prestige or of the enrollment market, but where the elite and the *would be* elite universities seek greater scholarly recognition, better and more academically qualified students, and higher rankings on such international league tables as the Times Higher Education Supplement's *World's Top 200 Universities* or Shanghai Jiao Tong University's *Academic Ranking of World Universities*.

Higher education finance, then, is burdened with a natural unit cost trajectory that in normal years will exceed the average rate of increase of consumer prices generally: that is, will naturally exceed the rate of inflation. Year-in and year-out. Not, as some politicians and journalists would have it, at a rate of increase that “...*just can't continue to rise like this*,” but at a rate of increase that very well can and probably will continue to rise at such rates as long as either taxpayers, parents, or students, or all of them together are willing to pay.² This natural unit cost increase of *inflation plus* is not a mark of managerial ineptitude or of faculty inefficiency. It is, rather, the entirely natural consequence of the nature of the underlying

²This does not mean that spending *will* increase: indeed, it usually does not—and this is the widespread condition of austerity that we are trying to explain. In short, this *natural* per-student expenditure is what it would take to truly “keep up” and not be plagued by the aforementioned *manifestations of austerity*.

higher educational production function— along with the fact that in any set of measures that are to be averaged, approximately one-half of them will be above, and about one-half below, this average. And since an official rate of inflation is nothing more (or less) than an average of a great many price increases, it should be no surprise that the cost and price increases of about one-half of the goods and/or services produced in any economy—including higher education with its limited capacity for the replacement of faculty with technology—will be in this “*greater than*” half.³

Increasing Enrollments

The second trend, affecting national systems more than individual universities, is increasing enrollments. These increases, which accelerate the financial impact of the aforementioned increases in per-student costs, are a function of three forces, which vary greatly among countries. The first of these is demographics: specifically the change (generally the growth) over time in the number of youth within the conventional college or university age cohort (ages 18 through about 24). Some countries such as Italy, Germany, and other countries in Southern Europe, Russia, and Japan are experiencing demographic declines. Most countries, however—and nearly all low income countries, are experiencing increases in the traditional university age cohort (UNESCO-UIS/OECD 2005).

The second force affecting enrollments is the participation rate of this (generally increasing) university age cohort (UNESCO Institute for Statistics 2006). Increasing participation, in turn, is a function of: (a) increases in enrollments at secondary levels; (b) changing employment opportunities and a perception of increasing competition for these fewer “good” jobs which will be enhanced by higher education; and (c) an increasing regard for social and economic mobility and justice, leading to policies designed to increase higher educational participation, particularly among those traditionally less represented, such as ethnic and linguistic minorities, girls (in some cultures), or students from poor secondary schools or otherwise thought to be educationally disadvantaged.

A final factor affecting enrollments in some countries is the increasing amount, or final level, of higher education per entering student. This, too, is an *accelerating* factor as first degree graduates perceive a need for even higher levels of education to be competitive (e.g. the growth of MBAs and other professional master’s degrees) and as professions (especially licensed professions such as teachers, and the non-physician health professions) endeavor to raise their stature and limit the numbers allowed to practice (thus limiting competition and enhancing status and remuneration).⁴

The impact of increasing enrollments on the financing of higher education, at least in the first instance, is to increase the cost and thus to increase yearly the public resources required to maintain the quality of the educational product—the likely shortfalls of which are be the

³ This explanation for the increasing costs of higher education does not take into consideration the possibility that the cost and the price of the higher educational product may be increasing because the *quality of the product is improving*. Or that the cost of the product—say, public higher education—may actually be decreasing—as labor costs are cut through wage and salary freezes and the substitution of cheap part-time labor for fully qualified (but expensive) full-time labor, or as productivity is forced to increase simply by “speeding up the line” through larger class sizes or increased teaching loads.

⁴ This may be countered in the E.U. Bologna region with a shortened (bachelors) first degree on the Continent. But the growth of professional master’s degrees is likely to show there as well.

focus of much of this monograph. At the same time, increasing enrollments also makes more possible the kinds of management actions—for example, raising student-to-faculty ratios or implementing new and more cost-effective pedagogies—that are extremely difficult in a mode of stable or declining enrollments, where efficiency measures almost inevitably mean terminating jobs and incurring the extraordinary levels of resistance and demoralization that attend any downsizing of an institution.

The Increasingly Knowledge-Based Economy

The third factor affecting the financing of higher education in virtually all countries is the increasing share of world production, especially in the already industrialized countries, that is moving either into services or into the so-called knowledge-based economy of high tech, design, finance, management and the like (and even in manufacturing, moving into modes that are less labor- and more capital-intensive). The result is to increase the value, both to countries and to individuals, of at least some forms of higher education: especially management, finance, law, and the so-called STEM fields of science, mathematics, engineering, and technology (World Bank 2002). The financial impact of this increasingly knowledge-based economy on higher education is manifested by the new (and usually more expensive) educational programs offered and by a redistribution of faculty and students among these new programs (both effects tending to further accelerate the increase in per-student costs) and also by the increased premium to individuals who have the requisite higher education as well as to countries with higher education systems that are high quality, oriented to needs of employers, and broadly inclusive.

This trend forms a third source for the increasing revenue needs of higher education everywhere and for the even greater austerity when these revenue needs are not forthcoming. At the same time, it also lays the groundwork for the possibility of increased higher educational investments both from governments (where such increases are possible and politically feasible) as well as from students or parents (also where such contributions are politically feasible and technically possible—as with student loan opportunities).

Faltering Governmental (Tax) Revenues

Governments everywhere struggle increasingly under escalating burdens of pensions and the rising costs of elementary and secondary education, health care, public infrastructure, security, and other social welfare costs. Electorates in many highly industrialized countries have been getting more conservative, particularly in their distaste for taxation and what they perceive to be wasteful government spending. Many European countries, with their high social welfare costs, and typically spending from one-third to more than one-half of national gross domestic products in the public sector, are trying to shift productive resources to the private sector and to reduce public deficits to comply with the requirements of the European Community and the Euro Zone. Russia, the rest of the countries that have emerged from the former Soviet Union, and the former Communist countries of Central and Eastern Europe all labor under the enormous costs of building an internationally-competitive productive infrastructure and weaning a labor force away from its deeply rooted dependence on state enter-

prises and governmental employment. The United States struggles with an over-consuming, under-saving population that is unwilling to tax itself for the public benefits it demands.

Taxation in the developing countries, where production and incomes often tend to be low anyway, is technically difficult. The financial challenge to governments is how to get a share of purchasing power when relatively little wealth comes from large, stable enterprises that can be taxed and that can also be counted upon to withhold taxes from their employees. Former Communist countries, once dependent on easy and extensive turnover taxes on state-owned enterprises, now need to tax personal or corporate incomes, retail or commercial transactions, and/or property—all of which are difficult to calculate, expensive to collect, and relatively easy to evade. Businesses and individuals in many countries seem increasingly able to hide incomes and the value of their taxable assets. And even in the wealthy highly industrialized countries with efficient tax systems, the increasing globalization of the world economy (see below) encourages productive enterprises and wealthy individuals to flee to countries with lower taxes.

Finally, governments everywhere are contending with politically and socially compelling competing needs for these increasingly scarce tax revenues. In much of the developing world and in many transitional countries, the competitors for public revenue include the replacement of decrepit public infrastructure, unfunded pension obligations, the need in most countries for a workable social safety net, and the cost of reversing generations of environmental degradation. In Sub-Saharan Africa, the competition for the extremely scarce public dollar is truly formidable and includes, in addition to the needs listed above, public health, the old scourge of malaria and new pandemic of HIV-AIDS, elementary secondary education, and assistance to a badly faltering economy. Finally, although the government (or taxpayer) in most developing countries as throughout the world will continue to be the principal revenue source for public higher education, most or even all of whatever limited additional revenue can be squeezed out of the public treasuries for higher education will be absorbed by the need to accommodate the inevitably expanding enrollments, leaving little or nothing to accommodate what ought to be the rising unit, or per-student, costs (much less allowing investment in new programs and pedagogies or in academic research).

Increasing Globalization

Globalization is not well-defined and is almost certainly an overused term in the discourse of higher education and of the economic, political, and social trends that form the backdrop for this review of worldwide trends in the financing of higher education. For the purpose of this chapter, however, globalization refers to the increasing *internationalization* (which implies a diminishing significance of national borders and even of nation states themselves) of: (a) *information and knowledge*, which is greatly facilitated by telecommunications that can send billions of digitized bits of information per second by optical fiber or microwave for fractions of pennies per mile; (b) *capital*, or the flows of claims on wealth between savers and borrowers (or investors), including students; and (c) *production*, which is increasingly sophisticated, technical, and capital-rich and which is therefore increasingly mobile and predisposed to locating where politics are stable, labor costs are low, contracts are enforceable, and tax and regulatory climates are benign. Thus in the globalized economy, wealth and power increas-

ingly flow less from the location of natural resources (with the exception of oil and gas) and the production of goods, and more from the ownership of capital and knowledge, protected by enforceable contracts, patents, copyrights, and licensing agreements. Globalization further brings a *thinning* of the significance of that which is (or was) national and local, whether it be language, culture, traditions, or norms, and a correspondingly hegemonic flow of language and culture from the highly industrialized and technologically sophisticated countries represented by the members of the OECD (especially the United States and the other English-speaking members).

The impact of globalization on higher education finance is to further raise the stakes to both nations and individuals of having or obtaining high levels of knowledge and skills—and thus to increased levels of quality higher education. Globalization also applies directly to higher education in the increased ability of universities and other suppliers of knowledge to transmit this knowledge across borders electronically and without much, if any, control or even regulation by local or nation state governments. Finally, globalization has a profound impact on the financing of all publicly financed agencies, including universities (both public and private), in its limiting effect on the ability of governments to tax and thus to keep up with higher education's voracious and continuous revenue needs (and so underscoring the imperative of increasing non-governmental revenues).

Increasing Liberalization of Economies

A final trend or set of related trends in most countries (most wrenchingly in the former Communist countries) is a movement in the direction of increasing liberalization of economies. This trend conveys a greater reliance on (or acceptance of) market forces and a commensurately lesser dependence on government to allocate resources, set prices, determine production technologies, and compensate individuals for their contributions to output. Along with this increasing liberalization comes increased decentralization, devolution, and privatization of the productive economy—including institutions such as public universities that may remain publicly owned and ultimately publicly controlled, but that are increasingly *privatized* in their reliance on non-governmental revenues, responsiveness to market forces, and incorporation of managerial norms associated with private enterprise. Although large public sectors, generous economic safety nets, and redistributive taxes remain in many countries (e.g. the Nordic countries), and public ownership and heavy regulation of factories and financial institutions remain in most formerly communist countries (e.g. Russia and China), the governmental ownership of all means of production and the *dirigisme* of governmental bureaucracies in most countries are giving way to governmental *steering* and to the policies and procedures associated with the *New Public Management* (Barzeley 2001, Almaral 2003).

Two complementary effects of this liberalization on higher education are, first, the encouragement of private higher education (both for-profit and not-for-profit) and second and equally important, the privatization of public higher education. Regardless of the legal *publicness* or *privateness* of their ownership or the seeming *publicness* or *privateness* of their missions or their degree of dependence on public revenue, universities around the world, including both public and private institutions, are moving (or being forced to move) from a status very much like all other state agencies—that is, with clear governmental ownership, substantial govern-

mental or ministerial control, and governmental or civil service employment of faculty and staff—toward the status of *public corporations*, empowered to raise and keep supplemental revenue, employ and compensate staff, make contracts, incur debt, and sue and be sued in courts of law.

Higher Educational Austerity

The immediate effect of these trends on the financing of higher education (again, varying by country) has been increasing austerity in universities and other institutions of postsecondary education as well as in national systems of higher education. This nearly universal—and growing—higher educational austerity in turn has affected:

- *Universities and other institutions of higher education*: manifested by e.g. overcrowding of lecture theatres; restive and otherwise unhappy faculty; insufficient or outdated library holdings, computing, and Internet connectivity; a deterioration of physical plants; less time and support for faculty research; and a widely assumed loss in the quality of both teaching and learning as well as of research.
- *National systems of higher education*: manifested by capacity constraints, the inability to accommodate all graduates of academic secondary levels who are capable and desirous of further study, a loss of the most talented faculty to countries with fewer financial troubles, and an increasing inability to compete in the global knowledge economy.
- *Students*: facing tuition fees where there used to be none or very rapidly rising fees where they have existed, in addition to the rising costs of student living—all contributing to the need to work and earn while studying, or the need to go into debt, or both, for those fortunate enough to find a place at all (with many having left the system long before secondary school completion, never experiencing even the possibility of tertiary education).

This austerity has been most crippling in Sub-Saharan Africa but is serious throughout the developing countries, as well as in many of the so-called *transitional countries*, especially those emerging from the former Soviet Union. But the kind of austerity manifested in serious overcrowding can be seen as well in much of Europe and

Latin America, with students unable to find seats in lecture theatres and with instruction reduced to didactics and only rarely open to discussion or the opportunity to ask questions. And the kinds of austerity manifested in the loss of secure faculty positions and faculty morale or in students leaving higher education with burdensome levels of debt can be seen in countries as affluent as the United States, the United Kingdom, Sweden, and Canada.

Beyond this sheer austerity, and especially noticeable in countries that have moved toward the political right, is a diminution of trust in government and in the public sector generally, including (perhaps especially) public universities. This governmental mood goes beyond a mere insufficiency in public budgets to a loss of the esteem in which public universities were once held, to calls for additional and frequently burdensome systems of accountability, and to new forms of governmental intrusion into the management of universities (sometimes contradicting the more general trend away from over-regulation and toward greater university autonomy).

Policy Solutions to Higher Educational Austerity

Cost-Side Solutions

In response to these financial pressures and increasing demands for accountability, universities and national systems have sought solutions. Those solutions on the *cost side*—for example, increasing class sizes and teaching loads, deferring maintenance, substituting lower cost part-time faculty for higher cost full-time faculty, and dropping low priority programs—are both difficult, academically problematic, and heavily contested, especially by the faculty and their political allies who frequently reject outright the claims of insufficient public revenues and who, even if they accept the basic economic principle of scarcity, may have very different notions of proper academic priorities from either their governments or their university leaders. Most injurious of all cost-side solutions to the goal of greater higher educational participation and accessibility are the solutions that simply limit capacity in the low-price public institutions of higher education (including both research universities and teaching-oriented colleges and technical institutes) and force increasing numbers of young men and women who have completed secondary education prepared for, and aspiring to, higher education of some sort, into higher priced (and generally lower quality) private colleges and universities or into the fee-paying tracks of the public universities—or, lacking the family resources to pay for the higher costs of private instruction and the high costs everywhere of food and lodging, into the workforce and forever away from their aspirations to a post-secondary education.

Strategic cost-side solutions, on the other hand, accept (at some point after serious political negotiation for additional public resources) the fundamental limitation of higher educational revenues and seek to use available resources more wisely—that is, strategically—in pursuit of the mix of goals that will include such (occasionally divergent) aims as academic quality, capacity, social equity, and responsiveness to the needs of students, employers, and society alike. The management of governmental agencies and the norms of civil service employment—which prize continuity of employment above all else—are generally incompatible with many strategic cost-side solutions to the financial problems characteristic of universities and other institutions of higher education. Typical problems with government agencies are laws, contracts and political considerations that forbid terminating staff (for any but the most egregious reason), hiring part time or temporary workers, contracting out services, carrying unspent funds forward from one fiscal year to the next, or shifting available funds from one budget category to another.

There has been a clear shift in governmental laws and regulations dealing with public universities in the last decade or two, especially in Europe (e.g. the Netherlands and the UK), in many Canadian provinces and virtually all American states, and very recently in China and Japan all in the direction of greater managerial autonomy and flexibility, frequently transforming public universities from simple governmental agencies into *public corporations* with the new authorities described under the *liberalization* trend described above. These new developments for greater managerial autonomy and flexibility—essentially moving toward managerial models associated with private enterprise—are collectively sometimes referred to as *New Public Management* and are designed to maximize the university's outputs of teaching and research for the public, or taxpayer, dollar, as well as to provide incentives for maximizing other-than-governmental revenue (Amaral, Meek, and Larsen 2003; Herbst 2006).

In New Public Management, the university rather than the ministry or the state budget office may be given authority, for example, to:

- establish wage and salary policies (formerly reserved to the ministry or parliament and to the government's financial, personnel, and civil service bureaucracies);
- reallocate expenditures from one category to another in response to institutionally-determined priorities (formerly generally forbidden);
- carry forward unspent funds from one fiscal period to the next, thus encouraging savings and institutional investment and discouraging spending for no reason other than avoidance of loss or the appearance of an excessive budget;
- enter into contracts with outside agencies and businesses expeditiously and competitively (formerly too frequently politicized and prolonged); and
- receive and own assets and sometimes even borrow and incur debt (not allowed in ordinary government agencies).

With such authority increasingly vested in a president or chief executive officer selected by a governing board (as in the United States, the United Kingdom and in other non-European countries) rather than in a faculty-elected rector (as in most of the European Continent), cost-side solutions to financial shortfalls may seek to lower the average per-student costs of instruction in ways such as: (a) substituting lower-cost junior or part-time faculty for higher-cost senior faculty; (b) lowering the faculty-student ratio by increasing average class size, (c) increasing teaching loads, and (d) differentiating faculty workloads. All such solutions are painful and all will be resisted especially by faculty and staff and their political allies. In the end, while cutting instructional expenses needs to be part of the solution to higher education's underlying financial dilemma, cost-side solutions alone will be insufficient for both substantive and political reasons. They are too divisive and too easily politicized *from both sides* (that is, from those on the outside who believe there are far more cuts yet to be made, as well as those on the inside who believe that the cuts that have already been made were unnecessary and have virtually destroyed their universities). But more importantly, the gap from the diverging trajectories of higher educational costs and available revenues is simply too wide to be closed by further cuts in expenditures alone, even with some of the more radical cost-side *solutions* like mergers and distance education. Finally, in many or even in most countries, the low hanging fruit of easy expenditure cuts and other efficiency measures have long since been taken, leaving only the most difficult and educationally problematic solutions on the cost-side. In short—and as segue to the next section—higher education in almost all countries must turn to non-governmental revenues to supplement the increasingly insufficient revenue available from governments.

Revenue Supplementation and Cost-sharing

Revenue supplementation as an alternative to cost cutting and as a preferred route to financial viability may take the form of faculty and institutional entrepreneurship, as in the selling of specialized and marketable teaching or scholarship, or in the renting of university

facilities, or in the commercial marketing of research discoveries. It may take the form of fund raising, appealing to alumni and other donors. Or—and the most sustainable and potentially lucrative—it may take the form of what has come to be known as *cost-sharing*. The term *cost-sharing* refers to a shift of at least some of the higher educational cost burden from governments, or taxpayers, to parents and/or students (Johnstone 1986, 2003, 2004, 2006). Cost-sharing is thus both a statement of fact—that is, that the costs of higher education are shared among governments (or taxpayers), parents, students, and philanthropists—and also a reference to a policy shift of some of these costs from a predominate (sometimes a virtually exclusive) reliance on governments to being *shared* among parents and/or students in addition to taxpayers.

Cost-sharing is most associated with tuition fees and “user charges,” especially for governmentally-or institutionally-provided room and board. However, a policy shift in the direction of greater cost-sharing can take several forms:

1. *The beginning of tuition (where higher education was formerly free or nearly so)*. This would be the case in China in 1997, or The United Kingdom in 1998, or Austria in 2001.
2. *The addition of a special tuition-paying track while maintaining free higher education for the regularly admitted, state-supported students*. Such a dual track tuition fee preserves the legal and political appearance of free higher education, which is particularly important (and is frequently enshrined in a constitution or a framework law) in formerly Marxist countries such as Russia, most of East and Central Europe, and other countries that were once part of the former Soviet Union, as well as to countries in East Africa with their legacy of African Socialism.
3. *A very sharp rise in tuition (where public sector tuition already exists)*. A shift in the direction of greater cost-sharing requires that the rise in tuition be greater than the rise in institutional costs generally in order for the government’s, or taxpayer’s, share to be lessened, and the parent’s and / or student’s shares to rise commensurately. This has been the case recently in most of the states in the United States and most of the provinces in Canada as many state and provincial governments have failed to maintain their former “shares” of public university expenses and as public university tuitions have been increased very rapidly to “fill in the gaps” left by the failure of government funding to keep pace with the rising costs of higher education.
4. *The imposition of “user charges,” or fees, to recover the expenses of what were once governmentally-or institutionally-provided (and heavily subsidized) residence and dining halls*. This has been happening in most countries, including virtually all the formerly Communist/Socialist countries, and most notably and controversially, most of the countries in Sub-Saharan Africa, where subsidized living costs at one time absorbed the bulk the higher educational budgets. In the Nordic countries of Sweden, Norway, Finland, and Denmark, where higher education remains “free,” the expenses to students are exclusively the expenses of student living, which are very high in those countries and which are “shared” neither by taxpayers nor (at least officially) by parents, but rather are borne mainly or entirely by the students, largely in the form of student loans (which costs are still shared by the taxpayer in the form of repayment subsidies).

5. *The elimination or reduction of student grants or scholarships.* This is sometimes accomplished simply by “freezing” grant or loan levels, or holding them constant in the face of general inflation, which then erodes their real value. This began happening to the once very generous grants in Britain (which were later abandoned altogether) and has happened to the value of the maintenance grants in most of the communist or socialist countries of the former Soviet Union, Eastern and Central Europe, and Asia, as well as many countries in Africa.
6. *An increase in the effective cost recovery on student loans.* This can be accomplished through a diminution of the subsidies on student loans (similar to the diminution in the value of non-repayable grants) and might be accomplished through an increase in interest rates, or a reduction in the length of time that interest is not charged, or through a reduction in the numbers of loans for which the repayments, for any number of reasons, are forgiven. Or, the effective cost recovery might be accomplished through a tightening of collections, or a reduction in the instances of default (as in the United States in the 1990s) with no change in the effective rates of interest paid by those who were repaying anyway.
7. *The limitation of capacity in the low or tuition free public sector together with the official encouragement (and frequently some public subsidization) of a tuition-dependent private higher education sector.* A number of countries—notably Japan, Korea, the Philippines, Indonesia, Brazil, and other countries in Latin America and East Asia—have avoided much of what would otherwise have been significant governmental expenditure on higher education by keeping a limited public sector—usually elite and selective—and shifting much of the costs of expanded participation to parents and students through the encouragement of a substantial and growing private higher education sector.

Although cost-sharing may take on these different forms, the imposition of, and/or large increases in, tuition fees provides the greatest financial impact. This is because tuition fees, aside from the need to rebate some of the aggregate income in the form of grants or discounts to preserve accessibility, can be both financially significant and on-going, and can even be designed to regularly increase, thus keeping pace with the inevitably rising per-student costs of instruction. Also, unlike most forms of faculty entrepreneurship, tuition fees do not divert faculty from the core instructional mission (and according to many observers, actually have a beneficial effect of improving the quality of teaching and the relevance of the curriculum). Perhaps for these reasons, tuition fees are also the most politically charged and ideologically resisted form of cost-sharing and thus have become a symbol of the conflict between those who believe that government must continue to provide higher education free of any charge, and those who believe in the imperative of cost-sharing and especially of tuition fees.

Political and Ideological Context

The trends that so affect the financing of higher education as well as the various policy solutions to the resulting austerity described above occur within country-specific as well as global political and ideological contexts. At the risk of gross oversimplification, at the extreme political and ideological left remain those views accepting the appropriateness of government-

tal ownership of virtually all institutionalized means of production (including universities and colleges) as well as governmental allocation of resources, the establishment of prices, and the remuneration of workers. However, as the former *command* economies have given way to the so-called *transitional* economies, which accept a large role for private enterprise and the useful place of markets in the allocation of resources and rewards, the political left has become characterized (among other ways) less by its adherence to an old Soviet system of production, distribution, and reward and more by its continuing advocacy of high levels of taxation, governmental regulation, and public employment, and by its criticism of the income disparities, economic instability, competition, and commercialism associated with markets and capitalism. This *critical left* is preoccupied with what it sees as the pervasive role of race/ethnicity, gender, and socio-economic class in the distribution of power, status, and wealth in those countries that embrace markets and private enterprise, and it tends to view poor countries (similar to the way it views poor people) as victims—of the World Bank and other agencies of international finance and of the investment and trade policies of the advanced industrialized nations.

At the other extreme are the views associated with the far right that would diminish public employment and the size of the public sector generally, including publicly owned and financed higher education. The political right tends to view *government*, including both politicians and civil servants, as less productive and more frequently self-serving, preoccupied with maintaining the salaries and other emoluments that go with governmental employment, and generally oblivious to the view that governmental employees must live off the products created mainly in the private sector and purchased by governments (which is to say, effectively confiscated by direct and indirect taxes or by inflationary deficit financing). In keeping with this mistrust of governmental institutions (including public universities) and governmental employees (including faculty and staff of these public universities), those on the right tend to be more critical of what they perceive to be governmental waste and more insistent on greater measures of accountability. At the same time, the political right is more accepting of the economic instabilities and the disparities in income and wealth that follow capitalism as a necessary price for the dynamism and high productivity of private enterprise. The right generally prefers private higher education—although most will accept some governmental cash transfers to *their* private institutions in order to “level the playing field” and to provide constructive examples to the public universities. The political right also tends to emphasize the need to recognize and select primarily or even exclusively for “merit, and therefore favors more rigor and “merit”—and less or no compensatory preferences, or affirmative action, in selecting those who are to go on to higher education. (Correspondingly, the right tends to downplay the role[s] of race, class, and gender in the determination of who comes into power, privilege, and remuneration.)

As in any portrayal of a range, most countries and most governments and most polities are somewhere near the center, generally vacillating between a center right and a center left, but always feeling pressures from the extremes. Universities—especially public, but private universities as well—operate always in a country-specific political and economic context as well as in an historical context and in an increasingly globalized international context. The financial problems as well as the possible solutions and their likelihood of adoption all occur within these larger contexts. At the same time, and unlike many scholars of comparative higher education (who are tend to be non-economists and mainly to our political left), we believe that the aforementioned factors most directly affecting the financing of higher education—the

inexorably rising per-student costs, the increasing participation and consequent increasing enrollments, the limits in most countries on governmental taxing capabilities, and the lengthy queue of socially and politically compelling competing public needs—are beyond politics and ideologies.

Politics and ideology are not immaterial; aggressively capitalistic United States and the United Kingdom had different priorities and put forth different solutions to the problems of higher educational austerity than did the former Soviet Union under its Marxist-Leninist command economy and will probably continue to differ from the new transitional countries, with their socialist-market systems, or from the social welfare democracies of Scandinavia. However, the increasing reach of tuition fees and other forms of revenue diversification and the increasing pressures for accountability, or more institutional autonomy owe far more to a virtually universal underlying higher education production function, to the increasing demand for higher education, and to demographics than to political abstractions like globalization or capitalism (academic or otherwise) or to any prescriptions of the World Bank, multinational corporations, or a hegemonic Anglo-America.

Higher Educational Finance and Accessibility

The costs of higher education, including the per-student costs of instruction, the institutionally-borne costs of research (that is, research costs that are not externally supported), the capital and operating costs of accommodating increased enrollments, and the expenses of student maintenance, are increasing rapidly and continuously throughout the world—in most countries are greatly exceeding the possible increases in governmental, or tax-generated, revenues. The resulting divergence in the trajectories of total higher educational costs (or revenue needs) and the total available public revenues is leading in most countries toward increasing higher educational austerity. This austerity is especially acute in developing countries that face the most financially devastating combination of: (a) pressures to accommodate the greatly increasing demand for additional higher educational places; (b) very limited availability of public revenues; and (c) extreme competition for these limited available public revenues.

This financial austerity is being met with a variety of so-called *solutions*. The most obvious solution on the cost-side is to constrain the budgets of the existing universities and to constrain also the student numbers, primarily by academic entrance requirements that hold capacity to the number that the scarce governmental funds can (barely) accommodate. Of course, this kind of rationing, while clearly superior to rationing purely by the market or by the ability of parents to bribe their children into universities, still favors those aspiring secondary school graduates who have had the advantages of the best preparation and who are, unsurprisingly, disproportionately from the most advantaged classes. Although the principal barriers to increasing higher educational accessibility in the poorest countries will continue to lie at the middle and secondary levels of education, and while the combination of living expenses and fees can also constitute barriers to higher educational entry, the biggest single barrier to access in low income countries is this public university capacity constraint, the solution to which requires new revenue from somewhere to build the lecture theatres, laboratory space, and dormitory rooms able to accommodate the rising numbers of higher educational aspirants from low income, rural, and ethnically-and linguistically-minority families.

This cost-revenue squeeze is also leading to attempts at revenue-side solutions, the most financially promising of which are the various forms of *cost-sharing*, or measures that require parents and/or students to bear an increasing share of these higher educational expenses. But imposing or increasing tuition and other fees, although a proven source of additional revenue best exemplified, by the financial success of the dual track tuition fee policies of Uganda, Kenya, and other East African countries (Marcucci and Johnstone 2007; Marcucci, Johnstone and Ngolovoi 2007), also imposes barriers on both access and completion. As in the United States and elsewhere in the OECD countries, these financial barriers are increasingly being met most cost-effectively with a combination of moderate tuition and other fees, targeted, or means-tested, grants, and student loans, the additional public costs of which, at least in theory, can be met with the additional fee revenue from the parents and students who can and will assume some of the costs of their higher education.

The *higher educational finance-access linkage*, therefore, is essentially circular: rising costs lead to capacity constraints, which limit higher education either to those academically prepared enough to be accepted into the low tuition public universities or to the sons and daughters of families with sufficient resources to get into the much higher fee private alternatives or into the high tuition fee tracks in the public universities. The shortage of revenue is forcing higher fees at private and public colleges and universities throughout the world—which then demands technically difficult and sometimes costly policies and programs of means-testing and student loans.

These very broad brushstrokes of conceptual overview lead to several conclusions regarding the higher educational finance-access linkage:

- Raising higher educational participation and access in the poorest countries needs to begin at the level of basic education by increasing the numbers of low income
- and other traditionally underrepresented students through a quality academic secondary education. The necessary rationing of higher educational places at the low-cost public higher educational alternatives must be sensitive to the social class, regional, and ethnic/linguistic differences in middle and secondary school preparation and should resist excessive reliance on those forms of screens that simply select for socioeconomic class or for the level and cost of the secondary school preparation.
- In most countries, where distances and the absence of accessible public transportation are such that attending a college or university while commuting from home is not possible, financially accessible (preferably means-tested) lodging and food must be made available. (This does not mean that it must be provided by the government or the public institution of higher education itself.)
- A combination of moderate tuition fees, means-tested grants, and moderately subsidized student loans is necessary for the cost-effective use of public higher educational revenue in the policy pursuit of expanding accessibility.
- In most countries, revenue supplementation, especially including tuition fees and other forms of cost-sharing, while necessary, should not be used to substitute for public revenues, but to supplement them. Student should be able to perceive benefits to them of any newly imposed tuition or other fees.

- Private alternatives should be encouraged; but governments should not restrict public attention and public resources to only the elite public universities and assume that the inevitable enrollment expansion can be handled only by a perpetually expanding private higher educational sector.
- A mix of higher or postsecondary educational alternatives (e.g. research universities, polytechnics, and other short cycle institutions) should be offered, with attention to the assurance of quality facilities, appropriate programs and curricula, and competent faculty at the non-university alternatives.
- Cost-sharing is usually politically contested when first implemented, but will be more acceptable when: (a) financial assistance is in place and has been made understandable, (b) the university management is perceived to be doing (or to have done) its share of difficult economizing, and (c) the government that is imposing the cost-sharing is perceived as generally efficient and free from corruption.

In these and other ways, governmental policies can pursue affordable, quality higher education for the inevitably growing numbers of traditional and non-traditional age students.

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