

International trends in the public and private financing of higher education

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Abstract Beginning by analyzing the major qualitative and quantitative changes in higher education around the world, this article examines international trends in their financial implications. It then demonstrates the state's inability to bear the entire rising financial burden, and explores the role of self-financing, and of the non-profit and for-profit private sectors, in sharing the enrolment and the cost burden. Examples of cost-sharing from around the world are given, with an analysis of the complexities and ambiguities of the meanings of *public* and *private* in reference to financing higher educational institutions. A discussion of private–public partnerships follows, and of the role that non-profit and for-profit cross-border higher education plays in financing. The conclusion offers eight policy themes for coping with the underlying situation of financial strategy and the simultaneous need to supplement scarce public revenues with private revenues, meanwhile increasing access to and participation in higher education for those not yet benefiting from it.

Keywords Higher education finance · Resource allocation · Cost sharing · Private higher education · Privatization of public higher education · Cross-border higher education · Student financial assistance

All over the world, higher education is at a crossroads today. Significant changes, both qualitative and quantitative, are challenging and changing institutions of higher education and the roles these institutions are playing in their economies and larger societies. Among the most salient qualitative changes are the following five.

First, developments in information and communication technology (ICT) are revolutionising our day-to-day lives as well as our colleges and universities. ICT is the source of

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scientific discoveries in such fields as agriculture, bioinformatics, biotechnology, genetic engineering, material science, and disaster management, as well as new disciplines like genomics, metabolic engineering, and solar and wind power technologies. ICT can add significantly to the costs of higher education, but just as significantly, it has the potential to lower costs and increase participation.

A second force affecting higher education is the phenomenon of globalization. Globalization is a process of promoting and enhancing interconnectedness among individuals, groups, institutions, companies, and countries; it is brought about by technological, economic, and political changes. Two of the main sources of globalization are information and innovation—both highly knowledge-intensive and easily portable, and thus both a product of higher education and a source of much of its change (Sanyal 2008).

A third change is the emergence of knowledge-based societies and knowledge-based economies, spread by globalization, which are compelling countries to expand access to higher education and upgrade the quality of their universities and colleges. To create this knowledge, knowledge-based economies need research universities that meet international standards; they also need more nationally- and regionally-oriented technical universities and colleges to train workers in applying this knowledge.

Fourth, the spread of liberal, market-friendly economic policies promotes economic growth and facilitates the expansion of higher educational quality, capacity, and participation. However, in its more extreme form, which critics call *neo-liberalism*, this trend exacerbates social problems such as greed, excessive consumerism, unequal distribution of wealth and income, and the exploitation of human, physical, and natural resources. Such problems call for the inclusion of moral and ethical values in higher education programmes. Market-friendly societies are also changing the financial patterns of institutions and systems of higher education through cost-sharing, commercialization, marketization, and the spread of for-profit institutions.

A fifth qualitative change affecting higher education is the increasing concern for sustainable and ecologically friendly economic development, which requires new behaviours, attitudes, and lifestyles from everyone. New knowledge and training capacities in such fields as food security, water management, forestation, desalination, green technology, alternative energy technologies, breakthrough technologies, and “bio-mimetics” all depend upon higher education (Mountbatten-Windsor 2009; Venter 2007).

The above challenges require us to reassess the content, structure, delivery methods, and other aspects of higher education programmes so they can turn out graduates with the following skills (Sanyal 2008):

- exploratory skills to explore natural resources.
- exploitation skills to produce those resources efficiently.
- negotiating skills to establish fair terms of trade with dominant partners.
- managerial skills to manage products and services effectively.
- conservation skills to conserve resources for sustainable development, and finally
- moral and ethical skills to achieve a just, equitable, and fair society.

At the same time, however, the massive quantitative expansion of higher education poses an even more visible and daunting financial challenge. This expansion is driven first of all by the underlying demographic increases in youth cohorts in many, although not all, countries, especially in Asia (other than China and Japan), Latin America, and Africa, and including many of the world’s poorest and already most populous countries, such as Bangladesh, Pakistan, Indonesia, Nigeria, and Ethiopia. The impact that these demographic increases have on higher educational enrolments is accelerated by the increased rates of

secondary school participation and graduation among these increasing youth cohorts. Again, this rate is greatest in the very low income countries that are experiencing the greatest increase in the growth of the youth cohorts.

The greater numbers of youth who are completing secondary school and wanting to go on to some form of higher education is driven on the demand side by the students themselves and their parents who recognize the high private returns to higher education, in terms of both lifetime incomes and greater opportunities, status, and attendant social and political influence. The supply of higher educational opportunities is also increasing—in spite of the rising costs and the financial squeeze on public revenues—because governments are recognizing that higher education contributes to economic growth, political stability, and other social returns. Finally, the supply of higher education has been enhanced in many countries by growing private sectors and by increased cost-effectiveness and accessibility through computing and information technology.

Enrolment in tertiary education in the whole world grew by 63% in under a decade, from 92.5 million in 1999 to 150.5 million in 2007. In the developing countries it increased by 92% during the same period, from 47.5 million to 91.3 million, and in the developed countries by 22%, from 36.4 million to 44.4 million. The largest percentage increase during that period has been in East Asia and the Pacific, at 102% from 22.9 million to 46.3 million. In this region, China has achieved the largest increase in both relative and absolute terms at 295%, from 6.4 million to 25.3 million. This is followed by Sub-Saharan Africa at 94%, from 2.1 million to 4.1 million. The South and West Asia region follows Sub-Saharan Africa, increasing during this time period by 89%, from 9.8 million to 18.4 million. In Central and Eastern Europe, the increase was 68%, from 12.4 million to 20.8 million, followed by Latin America and the Caribbean at 66%, from 10.7 million to 17.8 million. In Central Asia enrolment increased by 65%, from 1.2 million to 2.0 million. In the Arab States the increase is 37%, from 5.2 million to 7.1 million—the lowest in the developing world. Even in North America and Western Europe, where enrolments and participation rates were already high, the percentage increase has been 21%, from 28.2 million to 34 million (UNESCO 2010).

Despite this massive expansion both of higher education enrolments and of participation throughout the world, participation rates, as measured by the gross enrolment ratios (GERs) in the developing world, are not yet large enough to accommodate the rapidly increasing demand or need for higher education, as described above and noted in Table 1.

While the developed countries had achieved a GER of 58% in 2007, the developing countries had reached only 18%. Sub-Saharan Africa and South and West Asia have the lowest participation rates, at 6% and 11% respectively. China, with the world's largest enrolment in higher education, had a participation rate of 23%, while the world average is 26%. As these figures indicate, the worldwide demand for higher education will continue to grow.

Financial implications of change and growth

In combination, the needed qualitative changes in the content of higher education and the huge increases in projected enrolments call for massive and continuing increases in revenues. These increased revenues, in turn, must come from some combination of five sources: (a) *governments*, mainly through taxes or governmental borrowing; (b) *parents*, through payments for tuition and student living costs; (c) *students*, through term-time and

Table 1 Growth in total enrolments and gross enrolment ratios, 1999 and 2007

Year	Enrolment (in millions)		Gross enrolment ratio (%)	
	1999	2007	1999	2007
World	92.5	150.5	18	26
Developed countries	36.4	44.4	55	67
Developing countries	47.5	91.3	11	18
Arab states	5.2	7.1	19	22
Central and Eastern Europe	12.4	20.8	38	62
Central Asia	1.2	2.0	18	24
East Asia and Pacific	22.9	46.3	14	26
Latin America and the Caribbean	10.7	17.8	21	34
No. America and Western Europe	28.2	34.0	61	70
South and West Asia	9.8	18.4	7	11
Sub-Saharan Africa	2.1	4.1	4	6

Source: UNESCO (2010)

summer employment and borrowing; (d) *philanthropists or donors*, either individuals, foundations, or businesses, and through endowments as well as current giving; and (e) *businesses*, as purchasers of services or corporate philanthropists, or as collectors of earmarked taxes that are then passed on to consumers of their products.

Cost-sharing is a term used to describe the fact that these higher educational costs are being shared among these parties—in a form of zero-sum game, where the loss of funding from one source calls for an increase from one or more of the other sources. It also refers to the worldwide trend of these costs being shifted from a dominant reliance on governments to an increasing reliance on parents and students (Johnstone and Marcucci 2010). We turn next to the single most important of these sources—government, or the state—to examine the likelihood of the state being able to provide these increasing revenues.

The role of the state in funding higher education

Using data from the UNESCO Institute of Statistics (UIS 2010) on 104 countries, we calculated the changes for the period 1999 to 2009 both in public higher education expenditures per student and in GDP per capita. This ratio—of public expenditure per student to the GDP per capita—is a rough measure of the capacity that states have to accommodate the growth in higher education's needs for revenue, controlling for the very great country and regional differences in per capita GDP. We calculated the change in this ratio for these countries at two points in time: 1999 and 2009. Table 2 shows, by region, the number of states exhibiting increases or decreases in this key ratio over this time period.

As Table 2 shows, in 81 out of the 104 countries, this key ratio dropped. All the reporting Arab states and the South and West Asian countries showed a decrease, along with 94.7% of the Latin America and Caribbean countries and 80% of the Central Asian countries. The region where the lowest percentage of countries had a decreased ratio was Sub-Saharan Africa at 65.2%. A World Bank (2010) report confirmed this finding for

Table 2 Number of countries exhibiting changes (+ or -) in the ratio of public higher education expenditure per student to GDP per capita, by region

Region	Increase	Decrease	Total	% Decrease
Arab states	0	7	7	100.0
Central and Eastern Europe	4	10	14	71.4
Central Asia	1	4	5	80.0
East Asia and Pacific	3	8	11	72.7
Latin America/Caribbean	1	18	19	94.7
North America/Western Europe	6	14	20	70.0
South and West Asia	0	5	5	100.0
Sub-Saharan Africa	8	15	23	65.2
Total	23	81	104	77.9

Source: Table created by authors using data in UIS (2010, Table 19)

For each country, the year closest to 1999 was considered as the base year and that closest to 2009 as the final year

Sub-Saharan Africa: annual public expenditure per student as a percentage of GDP per capita fell from 352.7% in 1990 to 292.7% in 2006 (p. 21). Although the points of time and the coverage of the region vary, the trend is expected to continue in the same direction. This supports the conclusion that in most regions of the world—and especially in the developing world—states have far from adequate capacity to provide the financial resources needed for the critical expansion of higher education.

The worldwide economic crisis starting in 2008 has aggravated the situation. The world's leading economies are still (as of December 2010) emerging from the worst economic crisis since the Great Depression. This global economic downturn has adversely affected the developing countries as well, through reductions in export earnings, remittances, aid flows, and foreign direct investment. The financial impact on education has been severe. The new government in the United Kingdom is proposing both to slash university budgets and to increase tuition fees dramatically. Public institutions in the United States, supported by the 50 states that must balance their budgets in the face of declining tax revenues and are unable to borrow for operations, are also cutting budgets and increasing tuition fees. Private universities in the United States, Japan, and other countries with significant private sectors are losing applicants as middle-class families suffer from static incomes and high unemployment. Even the wealthy universities in the United States and the United Kingdom such as Harvard, Oxford, Cambridge, and Yale have lost billions of dollars from their endowments, necessitating commensurate cuts in their operating budgets.

Two main factors explain why state revenues from taxation and borrowing cannot keep up with higher education's already high and very rapidly rising annual revenue needs, apart from the fact that the global economic slowdown has reduced tax revenues in most countries, though they should return with economic recovery. The first factor is the sheer technical difficulty and expense of collecting taxes on property, commercial transactions, and incomes. This difficulty is exacerbated by tax avoidance, which is made even more difficult to combat by globalization and the ease of moving businesses and residences to countries with lower taxes. The second factor inhibiting the availability of tax revenues for higher education is especially serious in low-income countries that may be experiencing

the greatest enrolment pressures and therefore the greatest increase in needs for revenue. This is the competition from other socially and politically compelling needs such as elementary and secondary education, public health, housing, clean water, and improved transportation, all of which need some of the limited available public revenue. For these reasons, many countries are turning to the other four sources of revenue—and especially to parents and students—to supplement the increasingly inadequate public resources for higher education's increasing revenue needs.

Cost-sharing in higher education

Many economists and policy analysts promote the idea of cost-sharing, or shifting some of the increasing costs of higher education—including the institutional costs of instruction and those for food, lodging, and other elements of student maintenance—from governments and taxpayers to parents and students. One argument for this is equity: in virtually all societies, the benefits of higher education are realized disproportionately by the sons and daughters of the better off and the more privileged, while the taxes to pay for the increasingly costly higher education are borne by all citizens (and under some systems of finance disproportionately by the poor). Proponents of at least some significant cost-sharing also claim that charging some fees for tuition, food, and lodging makes for greater efficiency, both in the provision of the higher education and in its consumption. But the more compelling argument for cost-sharing may be the sheer need for revenue to supplement the increasingly insufficient sources of public revenue. The position of UNESCO (2004) with respect to the politically volatile issue of cost-sharing has been clearly, if subtly, stated as follows: “With regard to inputs, the general consensus is that financial responsibilities should be shared by all stakeholders. More concretely, increased contributions are expected not only from the state but also from students and their families, and from industry and business” (p. 13).

Seven principal forms of cost-sharing have been described, and we summarize them here (Johnstone and Marcucci 2010; Johnstone 1986, 2004, 2006a, b).

The introduction of more than nominal tuition fees in public institutions of higher education. This was done in China in 1997, the United Kingdom and the Czech Republic in 1998, Austria in 2001, and Germany in 2005. With devolution of the constituent countries of the United Kingdom in 1999, Scotland first replaced *up-front* with *deferred* tuition fees, and then abandoned tuition payments altogether in 2008. England and Wales followed suit by also shifting from up-front to deferred tuition fees. As of late 2010 they seem to be on the verge of announcing a very large increase in these deferred fees that will be automatically covered by larger student loans. In 2000, more than 20% of the total operating budgets of Chinese higher education institutions were covered by tuition fees and other fees paid by students (Arimoto 2006).

The introduction of a dual-track tuition charge, in which free or only nominal tuition fees are preserved for a restricted number of highly qualified students, usually on the basis of examination scores, while other less-qualified students are admitted within a fee-paying track. In this way, governments in which free or very-low-fee higher education is enshrined in a constitution or framework law (especially common in former communist countries) can claim to be following the law (for these so-called *regular* students), while earning substantial amounts of revenue from the fee-paying students. Dual-track tuition is practised in Russia, Eastern and Central Europe, India, Pakistan, and East African countries such as Kenya and Uganda, among others.

A very sharp rise in tuition fees—that is, at rates in excess of the increase in actual per-student costs. Such a shift has been happening for more than a decade in the United States and Canada, and in late 2010 seems to be on the verge of happening in the constituent countries of the United Kingdom. The Indian Institutes of Management and Technology also increased their fees sharply in recent years. Such increases allow governments to shift greater portions of the per-student costs onto parents and/or students, or allow public sector institutions to increase enrolments without additional governmental revenue—or both.

The imposition of user charges, to be paid by parents and/or students, on food and lodging that in many countries was formerly provided free or at heavily subsidized rates. This form of cost-sharing may be more politically palatable than tuition payments in countries that have traditionally provided free or very-low-fee higher education and are meeting resistance from students and politicians to the rising fees for instruction—but still need the revenue from some form of cost-sharing. User charges have increased in countries like Norway and Sweden that continue to charge no tuition fees, as well as in Russia and Ethiopia, which employ dual track tuition charges. (Oddly enough, the costs for student living are often considerably higher—and may also be subject to greater yearly increases from inflation—than are the generally moderate tuition charges of most countries, yet they seem to escape the political controversies that so often accompany policies to increase tuition payments).

Decreasing the amounts of tax-supported student grants or scholarships and increasing the burden on parents or on the students themselves, who may be expected to assume either additional loans or additional employment or both. Tax support may be reduced by reducing the amount of the average grant, or the number of grants awarded, or both. Similarly, the government may reduce its costs either by directly cutting back on either the size or the number of maintenance grants, as in Russia and the United Kingdom, or by freezing the grants in an otherwise inflationary economy, which diminishes the real value (and the real cost to the government), as in Morocco. Or, the proportion of tax support in the student financial assistance package may be reduced through a shift in the form of student assistance from grants to loans, as in the United Kingdom and the United States.

A decrease in the subsidy cost of the average student loan, either through an increase in the interest rates that student borrowers pay, or an increase in the cost recovery of student loans through better servicing and collecting. For example, collections have been outsourced, and thus improved, in South Africa and Rwanda. In the United States, certain (mainly short-cycle, for-profit) colleges with historically high rates of borrower default have been removed from the list of institutions whose students are eligible for guaranteed loans.

The official encouragement of tuition-dependent private institutions, both non-profit and for-profit, sometimes combined with state subsidies for capital costs, student financial assistance, or even operating expenditures. Governments are increasingly recognizing not only that some form or forms of cost-sharing are necessary, but that private institutions can often offer the same educational benefits for fewer tax dollars, and can even provide models of efficiency and social responsiveness that benefit the states' public institutions. In fact, one of the most striking trends in higher education worldwide has been the growth of private higher education, both non-profit and for-profit. We discuss this trend in more detail in the next section.

The worldwide growth of private higher education

According to one estimate, 30% of world higher education enrolment is now private (Bjarnason et al. 2009, p. 8), while in the 1960s and 1970s little existed outside the United States, Japan, Korea, the Philippines, and some countries in Latin America. This growth of

private higher education has been the result not only of increased demand, as discussed above, but also of *differentiated* demand in many countries, where government provision of higher education may not be meeting the demand, for example, for religious education or short-term training in the areas of greatest employment growth such as business or computer science, or English language instruction. But private higher education and the reasons for its growth (or failure to grow) vary widely.

Private colleges and universities in the United States, for example, include many of the highest priced and most elite institutions, supported financially through a range of sources: large endowments, generous annual donations, and government-provided student financial assistance that is fully portable to private institutions. Moreover, the United States has a long history of students and their families paying tuition fees, a middle and upper-middle class that can afford to do so, and a culture that accepts the financial responsibility of parents, if financially able, for much of the cost of their children's higher education. In other countries, particularly in Latin America, Asia, and Africa, the shift of increasing numbers of students to the private sector is furthered by the imposition of ceilings on enrolments in the low-fee or free public universities. This is generally making the public sector more accommodating to the better prepared students—who are thus becoming more of an elite sector—and meanwhile channelling more and more students into the demand-absorbing private sector.

Japan, the Republic of Korea, Philippines, Indonesia, Brazil and some other countries in Latin America reflect policies that have shifted costs to parents and students by deliberately limiting the public sector and encouraging a growing, generally demand-absorbing, private sector. In Asia, based on an average for the period 2001–2007, Japan had the largest share of private enrolment at 77%, while Kyrgyzstan had the lowest at 7%. Malaysia, Kazakhstan, and the Islamic Republic of Iran were roughly one-half private. The Republic of Korea, Indonesia, and the Philippines were over 70% private. India had 31% private enrolment, while China had 11%. In the Latin American and Caribbean region, Chile had the highest share of private enrolment in the period 2002–2007 at 77.6%, followed by Brazil at 74.6%. El Salvador, Costa Rica, and Peru had more than half private enrolment. Cuba has none. In Europe, and based on information available from 2003 to 2009, only Cyprus had more than half of its enrolment private at 67%. All the other countries had less than 35%, with Slovenia having only 3%. In Africa, from 2003 to 2008, Gabon had the highest private enrolment at 47%, followed by Mozambique and Ethiopia at 32% and 24% respectively. South Africa and Nigeria had the lowest share of total enrolment in private colleges and universities, at 4% (Bjarnason et al. 2009).

Among the Arab states, private higher education has been offered on a very small, but prominent, scale for many years by the American universities of Egypt, Jordan, and Lebanon. Now, governments are promoting private higher education in a planned way throughout the Middle East, often in partnership with European and American universities and occasionally with World Bank support, such as in Bahrain, Iraq, Kuwait, Saudi Arabia, Qatar, and the United Arab Emirates (Sanyal 1998). While the number of private institutions worldwide has increased very rapidly, most of them are small. In virtually all countries, the ratio of private to public institutions is greater than the ratio of private to public enrolment—demonstrating that most private institutions are relatively small.

Public and private financing of higher education

The growth of private higher education, and the increasing reliance of public universities and colleges on tuition payments and more nearly break-even fees for food and lodging,

are deeply contested. However, the concepts of *private* and *privatization*, when used in connection with institutions of higher education, are complex and easily misunderstood. *Private* means privately owned. It may be a *non-profit* entity; if so, ownership of the college or university is vested in a governing board, or trustees, who do not share in profits, but may share in some of the liabilities, and the institution is generally accorded significant tax advantages. It may also be a *for-profit* entity, owned, like any for-profit enterprise, either by a single individual, a group of individuals, or stockholders of a corporation.

A public college or university, on the other hand, is owned by the state, although this public *ownership* says little about the degree of public *control*. Thus, a public university may be like any other governmental agency, with day-to-day control by a government ministry and employees (members of the faculty) classified as civil servants. On the other hand, this public ownership may take the form of a public corporation: still publicly owned, but with substantial autonomy, little or no day-to-day government control, and the ability to execute contracts, hire its own faculty and staff, and otherwise operate much like a private non-profit corporation. Public universities are increasingly moving away from the *public agency* model and toward the *public corporation* model, especially in the advanced industrialized countries, including the United States, the United Kingdom, Japan, and even France, as of 2010 amid much controversy.

Neither public ownership nor public control, however, necessarily means total financial dependence on the government. Public institutions can be substantially privately funded through tuition payments, grants and contracts, and even philanthropy, as they increasingly are in the United States. At the same time, higher educational institutions that are private and non-profit can be substantially dependent on governmental financing. State financing of private universities can take many forms, from direct annual appropriations in support of operations (that is, just like public institutions), to more indirect forms of support. For example, the faculty and the institution may be eligible for competitive government grants, and students may be eligible for publicly funded grants and loans. Universities can also get support for capital construction and land acquisition, along with government guarantees and other forms of subsidy for institutional borrowing, and tax advantages for philanthropy. In short, public institutions almost everywhere have become more privatized, with tuition payments, philanthropy, and more managerial autonomy, at the same time as private institutions in many countries have become dependent on governments and more and more public in their missions.

State financing of otherwise (non-profit) privately-owned institutions may come in stages. The nominally private crown-chartered universities of Britain such as Cambridge and Oxford became virtual *public corporations* after World War II, as the government took over almost all of the current operating financing (that is, before tuition payments were re-introduced in 1998). It also assumed control over most aspects of operations, but retained most of the traditional prerogatives of public corporations, such as the ability to select their own leaders, hire and set the key terms and conditions of their faculty and staff, hold their own assets, and invest and assume debt. The constitutionally separate public universities of some U.S. states are similar: they are quite financially dependent on state financing, but have constitutional guarantees of autonomy from the state governments in matters of leadership, management, employment, curriculum, ownership of assets, and the right to make contracts, issue debt, and sue and be sued like any private corporation. The dependence of the public universities on annual state appropriations for substantial portions of their operating expenditures, however, gives governments in any country very considerable leverage over the affairs of any public university—even those with the nominal autonomy of a public corporation.

In countries where private institutions have only emerged in the twentieth or twenty-first century, other institutions, including Protestant churches, Roman Catholic religious orders, and other non-profit entities, may provide the initial investment, capital financing, and organization, with operating expenditures covered by tuition payments. Later, the state may intervene, taking over more of the financial responsibility for operations—often as the necessary tuition payments become too onerous to sustain enrolments—and thus inevitably assuming more day-to-day control. Even more recent examples in China are public universities themselves forming non-profit corporate affiliates that can become free of governmental restrictions, for example on faculty and staff wages and salaries as well as tuition payments. These become like the self-paying tracks within the public universities of many formerly socialist countries in the former Soviet Union, East and Central Europe, East Africa, and elsewhere—but with even more autonomy from governmental regulations.

Several Asian countries, including India, Pakistan, Bangladesh, and the Philippines, have encouraged the establishment of a significant number of private institutions by providing regular annual state operating support. Japanese private colleges and universities also have had regular state operating support—but with commensurate public control over their tuition fees and enrolments. Since 2004 the national universities in Japan have been turned into public corporations, to be run as semi-independent administrative bodies with much greater autonomy, including major authority over employment and the setting of tuition amounts, but with decreasing state revenue, and the requirement of accountability for results. In Europe, an OECD (2004, p. 290) report shows that 69.6% of private enrolment in the Netherlands and 59.6% of that in Belgium was covered by government support. Among the reporting non-OECD countries, Israel leads with 76.3% in government-supported private tertiary education, followed by Chile at 22.1%. Recently, the government of Tunisia set up a legal framework to encourage private investment in higher education; this has led to the creation of a large number of private institutions with government support (Zaiem 2005).

The lines demarcating public and private in reference to institutions of higher education, then, have become almost impossibly blurred. Thus, we avoid trying to distinguish unambiguously between *private* and *public* institutions of higher education, or even, within institutions that seem to be private, to differentiate unambiguously between private *non-profit* and private *for-profit*. Instead, it may be more useful to look for continua along five public and private dimensions of institutional variation. These are: (1) ownership; (2) purpose or mission; (3) source of revenue; (4) degree of state control and regulation (e.g. over the setting of tuition amounts or the terms and conditions of faculty and staff employment); and (5) the prevailing norms and values of the institution. This view provides the perspective shown in Table 3, in which we portray *public* and *private* as tendencies, or positions on the continua of privatization, for each of these five dimensions.

In this light, two issues are most critical for all governments with regard to their colleges and universities: (1) the *appropriate amount of tax support* (both to institutions and to students) relative to all the other competing claims on public revenues; and (2) the *appropriate degree of governmental control*, or *governmental steering*, over colleges and universities, whether public agencies, public corporations, or private institutions, either non-profit or for-profit. Those who tend to resist the advancement of private higher education, and what they perceive as an excessive privatisation of public universities and colleges, generally emphasize five points:

Table 3 Privatization in higher education as direction or tendency on multiple dimensions

Dimension ↓	High “publicness” ← Continua of privatization → High “privateness”			
Mission or purpose	Serves a clear “public” mission as determined by the state	Mission is avowedly both public and private, but as defined more by the institution	Mission is mainly to respond to students’ private interests, mainly vocational	Mission clearly serves private interests of students, clients, and owners
Ownership	Publicly owned: can be altered or even closed by state like any other state entity or agency	Public corporation: public with private characteristics or constitutional entity	Private non-profit: clearly private but with public accountability	Private for-profit: owned by individual proprietor, partners, or stockholders
Source of revenue	Dependent on public, or tax, revenue	Mainly public, but some tuition fees, or “cost sharing”	Dependent on tuition fees and donations; some public aid, e.g. to needy students	Tuition fee-dependent
Control by government	High state control, as in agency or ministry	Subject to controls, but less than other state agencies	High degree of autonomy; control limited to oversight	Controls limited to those over any other business
Norms of management	Academic norms; shared governance, antiauthoritarianism	Academic norms, but acceptance of need for effective management	Limited homage to academic norms; high management control	Operated like a business; norms from management

- Higher education is mainly a public good, benefitting all members of society not only through increased productivity and economic growth, but also contributing to political, social and cultural betterment (Vossensteyn 2004).
- Social rates of return, computed on the basis of the external monetary effects alone, account for some 6% to 15% for some developed countries (Blöndal et al. 2002). Similar evidence exists for developing countries. The addition of significant non-monetary benefits such as the role of higher education in strengthening civil societies, political stability, social cohesion and tolerance, and effective democracies, strengthens the case for state funding and state control.
- Disciplines and programmes that are strategic for the country’s sustainable development but may not be economically attractive in the short term need to be financed in large part by the state, whether in private or public universities.
- Without state support, neither banks, nor students, nor parents will have sufficient incentive to invest in higher education in its imperfect market. The benefits of the investment are not known until after graduation.
- Without state intervention, students from disadvantaged groups may not be able to pursue higher education.

At the same time, others argue for increasing reliance on private funding—both for some tuition charges in the public sector and for the encouragement of, and state financial support to, private colleges and universities, as well as for substantial autonomy for institutions, whether public or private. They make four points:

- The state subsidy itself is based on the taxes of all tax-paying citizens, but in all countries the students (that is, the primary beneficiaries) are disproportionately from higher socio-economic classes or from privileged ethnic or linguistic groups. The incidence of taxation falling on all citizens, including the poorest, is especially pronounced when taxes are paid by consumers, whether directly as in sales or consumption taxes, or indirectly as in taxes on businesses that are passed on to consumers, such as taxes on electricity, fuel, or food. This is especially the case when the state is borrowing and effectively printing the money, which simply causes inflation that falls even more heavily on the poor and those with fixed incomes. In short, in most countries all citizens in most countries pay for the high costs of higher education, but the beneficiaries are disproportionately from the more privileged groups.
- Higher education has monetary benefits for the individuals pursuing it, in the form of higher private rates of return; among the OECD countries, these rates vary from 8% in Japan to 18% in the United Kingdom (Blöndal et al. 2002).
- Higher education also provides considerable non-monetary benefits, including greater prestige, more choices of jobs and places to live, and generally a better quality of life.
- Finally, as we discussed above, state (mainly tax) funding in almost all countries simply cannot rise fast enough to keep up with the rapidly rising costs and revenue demands of higher education. This is especially the case in the low-income countries that are experiencing the fastest rise in potential enrolments and the greatest competition for the state's limited revenues.

For-profit higher education

Above we referred to the private higher education that has been growing throughout most of the world (albeit less in Europe than elsewhere) and which increasingly has the blessing, and frequently the direct and indirect financial support, of the state. This education is legally and at least nominally non-profit. However, higher education that is avowedly and legally for-profit has also been growing in many countries. This growth has been fuelled by the soaring demand for higher education, by the limitations on both the capacity and sometimes the programs offered in the public and non-profit sectors, and by the relatively high per-student costs of traditional public and non-profit private higher education. Aggressively efficient private management can offer instruction at very low costs per student when it is motivated by profits, able to avoid many of the regulatory burdens of state higher education, unencumbered by faculty unions or traditions of academic governance, able to selectively offer programs only in low-cost, high-demand fields, and enabled by new instructional technologies. In the United States, private for-profit institutions can even benefit from the same kind of tax-supported student financial assistance that is given to students in the private non-profit sector.

Although for-profit higher education—granting both degrees and short-term certificates—has grown especially rapidly in the United States, examples are fairly common in other countries. Legislation to permit for-profit higher education was passed in the United Kingdom in 2004 and in Australia in 2005. Japan started experimenting with it in 2004. Malaysia, the Philippines, and Singapore are also promoting for-profit higher education as a part of state plans for higher education self-sufficiency, to cite only some examples (Garrett 2007). In 1999, the People's Republic of China saw its first publicly listed for-profit post-secondary education services company with fully accredited universities.

Since then, it has provided degree programmes to over 21,000 on campus students and e-learning services to 141,000 students through 15 university partners in an e-learning network (SUMFOLIO 2009). China's "Law for the facilitation of private schools", enacted in 2002, does not encourage making a profit as the primary aim, but does not explicitly prohibit it either (Cheng 2009). Among for-profit higher education providers, the University of Phoenix, founded in 1976, stands out in the size of its domain, hosting 13 publicly-held higher education firms in the United States and 19 others in countries around the world including China, India, Japan, Malaysia, the Republic of Korea, and Singapore. Courses are offered on-line, and include on-campus interactions in more than 200 locations for 100 degree programmes at the associate's, bachelor's, master's, and doctoral levels (Cheng 2009). This is now the largest college in the United States, approaching half a million students, with revenues of almost US \$4 billion (Smith 2010).

The growth of for-profit higher education in the United States has been fuelled by government funds. For example, the Pell Grant, a post-secondary educational federal grant program sponsored by the United States Department of Education, provided 24% of its US \$18.3 billion to profit-making institutions in 2008, with the for-profit University of Phoenix collecting the largest amount at US \$656.9 million (SLBA 2010). Another important for-profit higher education company is India's National Institute for Information Technology (NIIT) Limited. Listed on India's National Stock Exchange and the Bombay Stock Exchange, it is one of the world's largest information technology training and education companies, with 5 million students in classroom and on-line education across 20 states within India and 30 countries around the world, including more than 100 educational centres set up in China and other parts of the Asia-Pacific region. The United States, Canada, the United Kingdom, Australia, China, Indonesia, South Africa, and Nigeria are among the 29 countries where NIIT Limited has set up centres. In 2009, it, and its subsidiaries, had annual revenue of some US \$255 million (NIIT Limited 2009).

The principal advantages attributed to for-profit higher education are those attributed to all forms of private enterprise in market economies: their presumably greater efficiency and responsiveness to the fast-changing demands of both students and job markets. For-profit higher education—with some important exceptions such as the University of Phoenix in the United States—generally does not attempt to compete directly with traditional established universities, either public or private non-profit. Rather, for-profit institutions more commonly compete aggressively in the short-cycle, vocational, non-degree market for job-relevant skills, often catering to those who are disadvantaged or otherwise underserved, as well as to adults. They may thrive where the public institutions have failed to provide commensurately useful and job-relevant programs. The profit motive encourages both efficiency and accountability. Finally, as with all tuition fee-supported higher education, the costs to the state are said to be less, although the non-state revenue advantage of cost-sharing can come as easily from private non-profit higher education. And in either case, the savings to the state are lessened by amounts that the state may contribute, as in the United States, to the tuition fees via governmentally provided financial assistance to students.

At the same time, for-profit higher education is frequently criticized for overly aggressive recruitment of unqualified students, for the lack of professionalism and curricular authority in its academic staffs, and for what are sometimes viewed as excessive profits to owners and management—especially when some or even most of the revenue taken as profit is actually from taxpayers. In the United States, SLBA (2010), the Student Loan Borrower Assistance project of the National Consumer Law Center (NCLC), claims that the U.S. for-profit sector is more vulnerable to corruption and fraud. In December 2009

the owner of the University of Phoenix agreed to pay over US \$78 million to settle a false claims lawsuit for violating student aid laws. The NCLC also points out that while students at for-profit institutions borrow more than students at public or non-profit institutions, their completion rate is lower, contributing to the higher incidence both of unmanageable debts and of costly defaults.

Cross-border higher education and its financial implications

Cross-border education refers to the movement of students, researchers, instructors, knowledge, learning materials, and programmes across national/regional or geographic borders for educational purposes (Knight 2006). The phenomenon is as old as civilisation. However, the volume and forms of cross border higher education have increased dramatically in the past two decades. The forms have always included students crossing borders to other countries for degrees, for short-term academic experiences (either with or without transferable degree credits, referred to in the United States as *study abroad*), or for dissertation or post-doctoral research. These traditional forms have increased with the burgeoning worldwide demand for higher education, especially in low- and middle-income countries where the demand, driven by demographics and surging secondary school completion, is greatly exceeding the domestic capacity. The demand is increasing especially in China, India, and other Asian countries, as well as countries in the Middle East and North African Region where rising incomes, both of states and families, provide the financial wherewithal to send students to universities in the wealthy nations of the OECD, and especially to nations that can provide instruction in English, an attribute that privileges the United States, the United Kingdom, Canada, Australia, and New Zealand.

In recent years, much of cross-border higher education has taken a commercial turn: as a source of profits, or export earnings. The cross-border movement of students for profit, especially those who can afford the higher tuition fees, frequently charged to students from other countries, is furthered by the increasingly aggressive recruitment of students by the receiving, or providing, countries, which view the providing of such education as a significant source of export revenue. This for-profit cross-border higher education increased from 1.64 million students in 1999 to 2.45 million in 2004 (Bashir 2007). In 2004, the most important region that was sending students, thus *importing* education, was East Asia and the Pacific, with 720,000 students sent elsewhere for higher education, followed by Central and Eastern Europe sending out some 300,000. In 2004, the country that was most significant among these student-sending, or importing, countries was China, which sent some 343,000 students for study abroad, followed by India, which sent some 124,000. During this period, the three countries receiving the most students, and thus *exporting* the most education, were the United States, which received 573,000, the United Kingdom, which received 300,000, and Australia, which received 167,000 (UIS 2006).

Five English-speaking countries—the United Kingdom, United States, Australia, New Zealand, and Canada—have increased their income from the export of higher education in two ways. First, they recruit students who will pay full tuition fees and other fees; second, they offer programmes to foreign students in their home countries through a variety of delivery modes, charging very high fees. These and other exporting countries are investing in international campaigns to market their domestic programmes and services; their ministries of trade, commerce, and foreign affairs are selling their educational programmes abroad like any other exportable commodity. In 2005, the five higher education exporters mentioned above received US \$28 billion, which was almost eight times the total

commitments these countries made to bilateral and multi-lateral aid for higher education. The United States alone received US \$14.1 billion, with England and Australia accounting for US \$6.1 billion and US \$5.6 billion respectively. In 2008, US higher education exports had reached \$17.8 billion (Varghese 2010).

In addition to the aggressive marketing and recruitment, four other factors are promoting the increase in cross-border higher education as an export for profit:

- The countries that receive students (i.e., that export education) are increasingly searching for other revenue to make up for declining state support in their public sectors. A significant example was the decision of the United Kingdom, before tuition payments were inaugurated for domestic students, to begin charging full tuition fees to international students—even from Commonwealth countries—who had earlier not had to pay.
- In most of the receiving (exporting) countries, private higher education—both non-profit and for-profit—tends to be even more aggressive and successful in its marketing and recruitment of international students than the public sectors. For-profit cross-border higher education includes such publicly traded companies as Apollo, Career Education Services, University of Phoenix, and Sylvan Learning Systems, in the United States; Informatics in Singapore; NIIT, Tata Infotech, and APTECH in India; and corporate universities such as those run by Motorola and Toyota (Knight 2006).
- The receiving (exporting) countries are taking their programs into the sending (importing) countries via branch campuses rather than by recruiting students; they are also adding lodging and travel to the expenses that families must bear.
- Finally, they are exporting cross-border higher education by using instructional technology, which saves the expense of lodging and travel and of establishing branch campuses.

Beyond attracting fee-paying students from other countries as a form of export earnings, or profit, many countries have traditionally sought to attract students and scholars from other countries through grants and travel stipends. These may be a form of state, or even private, philanthropy, or foreign aid, or a public expenditure for the purpose of spreading political, ideological, or cultural influence. Such cross-border higher education is financed mostly by bilateral aid as overseas development assistance (ODA); multi-lateral aid constituted only about 3% of total ODA for higher education (Bashir 2007, Table 7). The richer countries support higher education in poorer countries by providing scholarships or by sending academic staff, and instructional and research materials. Donor countries benefit from these forms of assistance in part by knowing, and being able to influence, what their aid is procuring. Donor countries also benefit from skilled migration, favourable conditions for foreign investment, foreign markets for their goods and services, and the advancement of their geo-political interests. Such ODA for higher education increased from US \$1.34 billion in 1999 to US \$3.29 billion in 2004. In that year, France, with its 238,000 overseas students, Germany (with 260,000), and Japan together contributed more than 80% of the total bilateral aid for cross-border higher education (Bashir 2007).

Other examples of such non-profit, philanthropic and/or politically motivated, cross-border higher education assistance include these six:

- The American Fulbright Program is jointly financed by the U.S. State Department and the participating countries.
- The Erasmus Program of the European Union (EU) seeks to promote cross-border higher education throughout the EU.

- The EU's Erasmus Mundus Program provides assistance to non-EU students enrolling in advanced professional programs in consortia of European universities.
- China offers scholarships to students from Africa and other regions it sees as geopolitically important.
- Several of the smaller Gulf states have invested in creating academic cities to attract students from elsewhere in the Islamic world.
- The former Soviet Union once offered generous scholarships to students from developing countries.

Countries seeking to advance their universities in the rankings of so-called *world class* universities also seek to attract more international students as some of the ranking formulas include the proportion of students from other countries. Finally, as a further example of self-interested but non-commercial motives, countries facing a demographic decline in their own youth cohorts—Japan being a prime example—may seek increasing numbers of international students in order to maintain their overall enrolments in higher education, in addition to all the other reasons for seeking students from abroad.

Conclusions: Strategies for public and private financing of higher education

The worldwide condition of higher education is one of increasing austerity. On the one hand, costs are high and rising, as are the consequent revenue needs, driven by the social and economic needs for higher education in our increasingly globalized world economy. Compounding this are the political pressures of surging popular demand for admittance into colleges and universities that are generally already overcrowded. On the other hand, even in combination, public and private revenues cannot entirely meet these needs. Compounding this situation is the continued pervasive poverty throughout the world and the socially and politically compelling competition for limited public revenues. To make the situation even more grave, both of these situations—higher education's increasing needs for revenue, and the limitations of available public and private revenues—are most dire in developing countries.

The solutions, then, are clear in concept, although fraught with difficulties in practice. Efforts to finance higher education—especially in low- and middle-income countries—must aim to meet eight goals.

1. Maintain public tax support—in the face of all of the other competing claims on scarce public revenues.
2. Achieve greater efficiencies, in part by granting public universities and colleges more managerial autonomy—in spite of almost inevitable opposition from politicians, faculty, staff, and students, and in spite of the fact that most cost-cutting measures have already been implemented.
3. Additionally, achieve greater efficiencies by rationalizing the public budgeting of all colleges and universities, building in incentives to reallocate resources and invest in new programmes (Salmi and Hauptman 2006; Sanyal 1995; Sanyal and Martin 1998, 2006).
4. Diversify the public institutions, simultaneously increasing the resources (and efficiency) of a select number of research universities that can be dedicated to the creation of knowledge and the preservation of free inquiry. At the same time, give relatively more attention and resources to the institutions that are dedicated primarily to expanding participation in the future job market.

5. Increase private revenues by charging modest tuition fees and other fees in public universities—also in spite of the inevitable political opposition.
6. In countries that have not already done so, encourage, and modestly support, a growing private higher educational sector that can relieve some of the enrolment pressure, and provide forms of higher education that the public sector either cannot or will not.
7. Implement financial assistance in the form of means-tested grants and student loans that can cost-effectively maintain and even increase higher educational access and participation in the face of the almost inevitably rising privately-borne costs mentioned above.
8. Recognize that a substantial improvement of access to and participation in higher education—especially among the very poor, those in remote regions, and those of ethnic and linguistic minority groups—must begin with an improvement of public middle and secondary education.

Although these policy *solutions* will differ in their applicability and urgency in different countries, and although all of these recommendations must be considered in light of radically different political, economic, and cultural realities *on the ground*, they are, in principle, applicable to virtually all countries regardless of their stage of economic development or prevailing political and economic system. Most importantly, these policies need the support and participation of the World's multinational agencies such as UNESCO, OECD, the international development banks, international scholars and policy analysts, and a host of other NGOs dedicated to strengthening higher education.

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