

The Fragile College or University: An International Perspective on the Financial Fragility of Institutions and Systems

D Bruce Johnstone*

The Worldwide Financial Fragility of Higher Education

Fragility (at least of the financial kind—which is arguably the source of all kinds of fragility) is the normal, or default, condition of both institutions and systems¹ of higher education. This chapter will examine some similarities and differences in this financial fragility in the United States and in other countries of the world, as well as some similarities and differences in the causes of, and appropriate policy strategies in response to, financial fragility of individual institutions as opposed to the financial fragility of an entire country or of a US multi-campus public system.

It is true that some institutions and some systems (or the collectivities of public institutions in some countries) are more financially fragile than others, and a few institutions—notably a handful of heavily endowed elite American private colleges and universities—are exceptionally financially robust. But there is some fragility to the financial status of almost all other institutions throughout the world. Even some very well endowed institutions are having to pare expenses and struggling to maintain revenues, although great wealth gives an institution ways to absorb financial difficulties caused by temporary shortfalls in revenue or unanticipated surges expenditures without jeopardizing the fundamental mission or character of the institution. The truly financially fragile college or university, by contrast, is the institution (or in a macro sense, the higher educational system of a state or country) that is constantly on the edge of having to compromise its chosen mission or fundamental institutional character because of the inability to consistently raise enough revenue or shed enough expenditures—year after year—to maintain this mission and character.

That financial fragility is the default condition of most colleges and universities in the world is not because of pervasive worldwide mismanagement, nor is it because the governments of the world do not care enough about their institutions of higher education, whether public or private. Rather the fundamental cause is a natural trajectory of costs, or necessary expenditures, that tends in most years and in most countries to outpace the natural trajectory of revenues, both for institutions and (even more) for systems. In short, the underlying tendency toward financial fragility:

- is a worldwide phenomenon (albeit with significant differences that can better illuminate financial conditions and solutions in any single country);

* D. Bruce Johnstone is SUNY Distinguished Service Professor of Higher and Comparative Education Emeritus at the State University of New York at Buffalo and Director of the International Comparative Higher Education Finance and Accessibility Project. This paper was prepared as a chapter for Martin, James, James Samuels, and Associates, Eds. *Turnaround: Leading Stressed Colleges and Universities to Excellence*. Baltimore: The Johns Hopkins University Press, forthcoming 2008.

- applies to public and private institutions alike (although the underlying reasons for the shortfalls in revenues for private and public institutions are fundamentally different);
- applies as well as to public institutions and to public systems or to the institutions of entire countries (although some of the solutions theoretically available at least to some public *institutions*—such as downsizing, shedding high cost programs, or attracting a more socio-economically elite able to pay higher tuition fees—are almost certainly politically unavailable to entire public *systems*);
- applies to higher cost research universities, both elite and non-elite as well as to lower cost non-research, shorter cycle, colleges, also both elite and non-elite (although the vulnerabilities as well as the solutions differ considerably);
- is not fundamentally because colleges and universities are poorly managed (although many are);
- is not because a country or a state or a province is poor (although poverty clearly exacerbates financial fragility, and wealth gives opportunities for more thoughtful changes and long term solutions);
- is dynamic (that is, is not a function of costs and revenues being out of balance at a point in time, as in a bad year, when revenues may fall short or when there can be unanticipated surges in expenditures, but rather is dynamic—that is, due to the long run, natural trajectory of costs exceeding the long run, natural trajectory of revenues).

A Caveat about International Comparisons²

Looking at macro trends even in a single country is treacherous, and the practice is even more so in an international perspective. In the first place, it is necessary to suppress the temptation to perceive as actually happening that which one mainly wishes were so: the all-too-familiar conflation of a generally agreed upon reform agenda with a reasonable prediction of what will actually be, or the tendency to view as *trends* such seemingly worldwide developments as increased privatization, institutional autonomy, sector diversification, or a diminishing correlation between one's higher educational attainment and the circumstances of one's birth simply because these are on the reform agendas of political leaders, governments, and parastatal organizations throughout the world. In short, the fact that most observers *want* these things to happen, and the fact that many political and institutional leaders *say* they are happening still do not make them, in fact, happening at all (at least not in an extensive and lasting way).

The second danger in a depiction of international trends in higher education is the tendency to see things through a cultural lens and thus to see similarity and even *convergence* where reality is so much more complex and frequently full of subtle but profound differences. For example, I have been watching for years, with fascination, the halting and deeply-contested steps throughout Europe toward a *tuition fee*: part of a shift in the costs of higher education from an overwhelming reliance on the public taxpayer to costs that are *shared* (Johnstone 1986, 2003b, 2004). But shared with whom? In the American context, a tuition fee rests on the bedrock assumption of an *expected parental contribution*—at least to the limit of what can reasonably be expected through a common,

verifiable test of family financial *means* or *need*. However, what we in the United States too often fail to recognize is the peculiarity, especially to a Scandinavian, of the assumption that a college or university undergraduate student should be treated as a *financially dependent child* rather than the *young adult* that the Swedes consider him or her to be. The cost of university instruction in Scandinavia is assumed to be the responsibility of the State—and the parent's role is finished with the high taxes. *Cost-sharing* to the Swedes, then, does not mean parents facing a tuition bill but students facing the quite considerable costs of living with assistance neither from the government nor from their parents but rather with student loans. This is a little different from Germany, where the costs of instruction are still thought to be the responsibility of the state, but the costs of student living are assumed to be the financial responsibility of the parent, just like in the United States—with the added encouragement that the German child can take his or her parents to family court if they do not provide this expected support.

There are other differences, both legal and cultural. University students in Continental Europe are generally a year or two older than the traditional *college age* American student. In many countries, they have earned a legal or even a constitutional *right* to university admission by virtue of their academic high school diploma: no SATs, college applications, “safe schools,” or anxious waits by the mailbox in mid-April for the young German with his *abitur* from the Gymnasium or the young French women with her *Baccalaureate* from her Lycée.

The Australians have further obscured the financial responsibilities of the parents and students by pioneering the device of charging a tuition fee which, for most students and parents, will never be seen nor even consciously paid for, but will be withheld (with interest) from the students' paychecks after completion, deducted by their employer along with the deductions for income taxes, health insurance, and pension contributions (Chapman and Ryan 2002). The Scots adopted a similar system, and the English (with Wales and Northern Ireland not far behind) are scheduled to do likewise in 2006: replacing the former UK tuition fee—which has always been detested by the politically active student leadership and their faculty and parliamentary allies on the far political left—with an additional student debt burden. It is puzzling (at least to this American) that a *non means-tested additional loan* can be more politically palatable than the *means-tested tuition fee* it will replace (Richards 2002, Johnstone 2005c). The point is simply that a system of higher education with underlying costs very similar to the American research university is still embedded in a cultural and political context. The notion of parents being financially responsible for at least some of the costs of their children's higher education, at least through the undergraduate degree and at least to the extent of their measured ability to pay—which is viewed by us as American as entirely appropriate and equitable—is not necessarily so as viewed by other countries that we believe in most respects to be “just like us.”

The Rising Trajectory of Unit Costs

The underlying financial fragility of colleges and universities is due to the naturally diverging trajectories—that is, the tendencies over time—of per-student costs and available revenues. The upward trajectory of institutional unit, or per-student, costs is a function of two main factors.³ The first is the labor intensity of the enterprise, both of

teaching and of scholarship. As a consequence, unit costs in colleges and universities tend to track wages and salaries, essentially unrelieved by the steady substitution of capital for labor and/or by the outsourcing of production to regions or countries featuring lower wages, lower taxes, and fewer regulations that characterize the more productive, capital intensive, goods-producing sectors of the world economy. This is the phenomenon first identified in the economics literature by William Baumal and William Bowen (1966, Bowen 1968) as characteristic of the so-called *productivity immune* sectors of the economy such as live theater, symphony orchestras, social welfare agencies—and education. Because workers in such enterprises (e.g., faculty) typically get the same wage and salary increases, at least on average, as those in the capital intensive sectors of the economy (in which lower labor costs via additional capital or outsourcing produce real productivity gains and allow unit cost increases to be less than compensation increases), the unit cost increases in the labor intensive, *productivity immune* service sectors will inevitably exceed those in the capital intensive, *productivity receptive*, goods-producing sectors. Thus, the unit costs increases in higher education will, in most years and in most countries, be above average. Since the rate of inflation (in any country) is nothing more than a weighted average of many price increases, it is inevitable that the unit costs in higher education will rise in normal years faster than the rate of inflation.

Furthermore, if some of these costs are borne by tuition fees, then these tuition fees must also keep up with the unit cost increase and rise faster than the rate of inflation. If the share borne by the government does not keep up, then the tuition fee must rise even faster—considerably above the underlying rate of inflation—in order to cover both the tuition’s share of the cost increase and also the missing governmental share of the increase. And it is important to note that these cost and tuition price increases are incurring even under assumptions of no increases in enrollment, no new expenditures, and no new academic programs that cannot be fully funded by cuts in existing programs—any of which, if present, would raise the costs and the prices (i.e. the tuition fees) even further.

The Perverse Effect of Technology on Higher Education’s Unit Costs

Critics of higher education’s rising costs say that this presumed *immunity from productivity* is not immutable and that the application of new instructional technologies in teaching and learning—multi-way, distance learning via the Internet, for example, or video- and computer-assisted self-paced learning—could yield productivity advances if the professoriate would but allow their introduction. There is some truth to view that faculty all over the world—especially in the more elite institutions—are notoriously resistant to the acknowledgment that their teaching ought (or even *can*) be made more efficient, or that money is scarce, or that cuts in faculty or academic programs must occasionally be made. However, the barriers to higher educational cost savings from technology reflect more than a stubborn, Luddite opposition to technology. Indeed, faculty in the United States and in other advanced industrial nations where Internet connectivity is most accessible are voracious users of computers, the Internet, and technologically assisted instruction. But the dominant pressure is not to do what has always been done *more cheaply*, but to teach and conduct research as always, but to do these traditional academic tasks *better* with technology. Since producing considerably more (whether of teaching, learning, scholarship, or service) for only a little more cost is

clearly an increase in productivity, there can be little doubt that technology has already increased the productivity of higher educational institutions throughout the world, and little doubt but that this productivity increase can be expected to go on for the foreseeable future. But with few exceptions, technology has still made colleges and universities more, not less, *costly*.

Markets and the Costs of Higher Education

This commentary on the unit cost enhancing quality of technology in higher education is an illustration of the second factor underlying the inflation of higher educational unit costs, which is the pressure of the market. Far from being complacent, as our critics sometimes claim, higher educational management (i.e., presidents, deans, and governing boards) is perpetually dissatisfied with its share of the market and its relative prestige ranking. At the same time, the academic profession as a whole (frequently for very different reasons) is also constantly looking for greater scholarly recognition, breakthroughs in research, better ways to teach, and new academic programs. It may be true that this collective faculty drive for improvement is sometimes self-aggrandizing and with insufficient regard for the good of the institution. And it is not clear that society is necessarily better served by universities all struggling to displace one another on some putative prestige ladder with little or no sensitivity to the public opportunity costs of this quest (which may be less revenue for elementary or secondary education, public health, public infrastructure, or even tax relief). Nevertheless, this market-driven drive for betterment—for higher rankings, greater scholarly prestige, a deeper applicant pool, and a greater market share of top students and research contracts—is a major reason for the elite of America’s colleges and universities being the envy of the academic world. At the same time, this market-driven competition also drives up top faculty and administrative salaries, the institutionally-borne costs of research, and the expensive amenities that attract the most sought after students (and their parents), and thus contributes to the steep upward trajectory of higher educational costs and to the financial fragility of US colleges and universities.

Of course, market pressures can be a force for lowering costs as well—as markets tend to do in most of the goods-producing sectors of the world economy. Increasing attention to costs and prices can have similar effect in some colleges and universities—at least serving to moderate unit cost and tuition increases to increases closer to, or even below, the prevailing rate of inflation. Colleges and universities can always cut (or moderate) unit costs *when they absolutely must* by such techniques as freezing or even lowering faculty and staff compensation, substituting cheap part-time faculty (generally at very low wages) for regular full-time faculty, not replenishing library and equipment budgets or fixing all of the leaky roofs, or by forcing a kind of artificial productivity upon colleges and universities simply by increasing teaching loads and class sizes. Most of these examples, however, simply yield a *cheaper* higher education—not necessarily a *more productive* one. And this has been the case throughout the world where public college and university budgets have simply been cut due to the collapse of national economies or of taxing capacities, or where private college and university budgets have had to be cut similarly due simply to insufficient demand.

However, the more likely effect of market pressures on colleges and universities with any semblance of selectivity (that is, with surplus effective demand) is to drive costs

upward, not downward. This is especially true wherever demand considerably outstrips capacity, where the heavily subsidized price does not begin to cover costs (and in America, this is true even in the very high priced private sector), and where the effective demand—able to pay the tuition fees and sufficient to fill the classrooms—is effectively *tuition price inelastic*. In this way, the strong and relatively inelastic demand on the part of most students and parents for the most prestigious (selective) college possible complements the inclinations of the faculty and most academic leaders to provide “more and better,” largely without regard to the opportunity costs of these *betterments*. And so the college or university will, at least if it is able, provide compensation increases to its faculty and staff even as it consumes more costly inputs such as computing power, library resources, sophisticated scientific and telecommunications equipment, scholarships to assure the best class, space, and especially the best faculty that can be lured from other universities or from outside the academy. Its unit costs will rise in what the faculty and the institutional leaders will genuinely believe to be a proper and even a noble quest for a better product, as well as what the market is demanding (Johnstone 2001).

Rising Enrollments and the Cost Pressures on Countries or Systems

As if the nearly inexorable pressure on unit, or per-student, costs were not enough of a problem for institutions of higher education, these cost pressures are magnified at the level of the country or higher educational system by increasing enrollment pressures. (Just as *increasing cost pressures* translates to actual *expenditures* only when revenue is available and the operating budgets and expenditure levels can rise accordingly, *increasing enrollment pressures* refers to increasing numbers of *potential students* academically prepared for, and desiring to enter, a college or university, but translates to increasing enrollments only with sufficient system *capacity* and with enough families who have the *personal financial wherewithal* to afford the requisite tuition fees and costs of student living. In the United States and most of the rest of the highly industrialized, high-income countries, increasing enrollment pressures translate to enrollments because there is assumed to be sufficient affordable capacity. Much of the low-income world, however, suffers from insufficient affordable capacity, leaving some students academically prepared, but unable to find a place in any affordable public college or university.

Increasing enrollment pressures are a function of four principal phenomena:

1. Increases in the size of the traditional college and university going age cohort (i.e. the basic demographics of the country, modified—as in the United States and the other major English speaking higher educational systems—by substantial net higher educational exporting⁴).
2. Increases in the proportion of this traditional cohort seeking entry into institutions of higher education (i.e. increasing participation rates).
3. Increases in the numbers of college and university participants who are beyond the traditional college-going age but are desirous of, and prepared for, entry into a tertiary institution (in effect, an increase in the size, or extent, of the relevant age cohort).

4. Increases in the number of years (or more accurately, the number of courses taken) of the average college and university stay.

The basic “enrollment drivers” are the first two listed above: an expanding participation rate of an underlying expanding age cohort. But these two drivers can be accelerated by expanding lengths of stay and still further accelerated by the addition of adults who were by-passed by higher educational participation when they were young. The effect of all of these forces on higher educational *system costs*, particularly in low- and middle-income countries with historically high birth rates and historically low participation rates, can be explosive as the naturally increasing trajectory of per-student costs are greatly accelerated by increasing percentages of an increasing population seeking entry to a limited number of higher educational institutions.

All of these forces have at least theoretical limits. The most basic limit is demographic: the birth rate itself, and birth rates have been declining in much of Western Europe, Russia, and Japan. Participation rates, too, would seem to have a natural limit, although it is hard to conceive of the limit being reached while there are still—as there are in virtually all countries—participation disparities that are associated with socioeconomic class, gender, ethnicity, or language. But the acceleration of participation in countries where secondary school is virtually universal and where financial assistance removes at least most of the financial disincentives to college or university attendance will assuredly slow, and in combination with flat or declining birth rates, can conceivably—as may well be the case in Japan, Russia, and some West European countries—actually lead to slightly falling college and university enrollments. But in most of the world, high birth rates are combining with increasing higher educational participation rates to create increasing enrollment pressures.

The increasing level, or amount, of higher education partaken of by the average student also contributes to enrollment growth (even with no increase in the actual number of students), but this source of growth also has limits. The accretion of courses and degrees is a function of both the increasing amount and complexity of knowledge and also of the tendency of professions to enhance their status (and control competition) by requiring more education prior to entry. A very different sort of *multiplier effect*—that is, creating additional enrollments from the same number of students—can be observed in countries, such as the United States, that have been experiencing very high rates of attrition, or wastage, but that are seriously engaged in efforts to lessen the attrition (or to improve the persistence), the result being to increase the effective enrollment from the same size cohort of entering students.

At the same time, there are countervailing pressures on the European Continent that would reduce the number of year the average student takes to earn a first degree, and even reduce the average length or extent—and thus perhaps the cost—of an acceptable first degree.⁵ The rise of non-university sectors such as the Fachhochschulen in Germany, the HBO in the Netherlands, or the Instituts Universitaires de Technologie in France, as well as the introduction of an earlier Diplôme d’Étude Universitaires Général in the French university are all examples of efforts in the latter half of the Twentieth Century to shorten the traditional continental European *long first degree*. These efforts toward shortening at least the first degree have been greatly accelerated by the so-called *Bologna Process*, in which the European higher educational ministers began in 1997 to

move their higher education systems toward a more modularized (i.e. “course credit”) degree and to replace the traditional long first degree with a three- or four-year bachelors followed by a masters degree (European Higher Education Area 1999, European Centre for Higher Education 2005). It is difficult at this time (2006) to speculate on the probable effect of these converging phenomena in Europe on the total volume of higher educational instruction –and thus the total system or country level—instructional costs. But it is likely that the net effect in Europe will still be country- or system-level enrollment increases and overall increasing system costs.

The Faltering Trajectories of Revenues

We have been examining the phenomena of rising higher educational costs: per-student, or unit, costs in the case of individual institutions, magnified by the additional costs of enrollment increases in the case of higher educational systems (or entire countries). The other half of the story of pervasive higher educational financial fragility—in most years and in most countries, and whether for institutions or entire systems or countries—lies in the faltering trajectories of higher educational revenue.

For example, returning to the venue of the institution rather than the country or the multi-campus system, the upward pressure on unit costs does not mean that all college and university *budgets* will rise accordingly. In fact, only the most fortunate will be able to find the increased revenue, year-after-year, to meet these pressures. Others will find the increased revenue—mainly from the state or from tuition or from both—only in some years. In other years, these institutions will compensate either by *reducing the trajectory of costs*—for example, freezing positions, freezing compensation, or simply deferring expenditures—or replacing missing revenue from borrowing or drawing on reserves (i.e., internal borrowing).

The revenues from which the naturally increasing higher educational costs are to be paid (whether for the single institution or the system) come from five sources:

- 1) government, or taxpayers⁶, via public budgets;
- 2) students, via their share of any tuitions and fees, financed by part-time employment, by loans, or by savings;
- 3) parents, via their share of tuition fees;
- 4) philanthropists or donors, through current giving or the returns on past giving in the form of endowment; and
- 5) purchasers of university goods or services, via research grants, training fees, facilities rental, or the purchase of medical or other clinical services.

Only these five—which, together or at least on average, must increase in step with the natural increase in total higher educational costs. But let us consider the limits on each of these revenue sources.

1. Governments and taxpayers. Governments everywhere struggle under escalating burdens of pensions and other social welfare costs. Electorates in the highly industrialized countries have been getting more conservative, particularly in their distaste for taxation and government spending. Most Western 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 enterprises 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 many countries is also getting technically more difficult. Particularly in the developing and transitional countries, where production and incomes often tend to be low anyway, the financial challenge to governments is how to get a share of purchasing power when relatively little wealth seems to be getting produced, and when both businesses and individuals seem to be so successful at hiding taxable 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 encourages productive enterprises and wealthy individuals to flee to countries with lower wages and lower taxes.

Finally, governments everywhere are contending with politically and socially compelling competing needs for the increasingly scarce public dollars. In the United States these may be health care, pensions, elementary and secondary education, or, in 2006, the hugely expensive wars in Iraq and Afghanistan and the seemingly endless and expensive war against international terrorism. In the economic and political *transitional* worlds in Russia and the other countries emerging from the former Soviet Union, the competitors for scarce public revenue include the replacement of decrepit public infrastructure, unfunded pension obligations, the need 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. As a result, although the government (or taxpayer) will continue in the developing world 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 will be absorbed by the need to accommodate the inevitably expanding higher educational enrollments, leaving little (or nothing—or worse) to accommodate the rising unit, or per-student, costs—that is, the aforementioned natural unit cost trajectory—of the existing university faculty, staff, and facilities.

The problem with public revenue in the United States is faltering *state* tax revenue—which, unlike federal revenue, cannot be supplemented by deficits (at least not for state operations) and which faces voracious and politically powerful competitors such as elementary and secondary education, Medicare and Medicaid, and corrections. In much of the US South, Southwest, and West, the public systems of higher education are facing severe enrollment pressures stemming from demographics and in-migration on top of increasing the public college and university unit cost trajectories. Still another competitor for the already limited public revenue in the United States is the persistent call in many states (as well as at the federal level) for tax cuts. This call—in spite of the fact

that the US average tax burden is the lightest of almost any higher industrialized country—is in part a reflection of the swing toward political conservatism in the US that began in the mid 1990s. Along with calls for tax cuts and smaller public sectors in general, the 80s and 90s also saw increasing voter skepticism about public higher education and an increasing disinclination toward continuing annual budget increases at rates in excess of the rate of inflation.

Adding to the political vulnerability of public higher education in the United States, a US multi-campus public system is one of the larger items in the typical state operating budget, but the system frequently lacks the passionate political affection associated, for example, with a state flagship university or with state assistance to local schools, and so presents a vulnerable target in time of state fiscal stress (which is most of the time!). That is, a single entry in the annual budget of a state college or university system can carry an effective cut (depending on the size of the state and the system) of millions or tens of millions of dollars. In addition, as state multi-campus systems have been seeking, and generally getting, greater expenditure autonomy—that is, the ability to allocate and reallocate whatever money they ultimately get from the state governor and legislature—governors and legislators become politically insulated from the consequences of the budget cuts (that is, able to shift the blame for any specific budget cut on to the system head or the system governing board).

In the end, although state tax revenues will continue in the United States as in other countries to be the most important single source of public college and university revenue covering the costs of instruction (i.e. excluding research and clinical and auxiliary operations), it is a source that will, in most years, fail to keep pace with higher education's rising cost pressures, therefore requiring supplementation from non-tax sources, or expenditure cuts.

2. *Students.* The student as a revenue source for a share of the costs of higher education requires either (or both) accessible part-time jobs for young people (abundant in the United States, but not so in most other countries) or generally available student loans (also abundant in the United States as well as in Canada, Japan, Australia, New Zealand, the UK, the Netherlands, South Africa, Scandinavia, and many other countries), but not so as of 2006 in e.g. France, Italy, Russia, India, or most of the other countries in Africa.⁷ A student loan program with a substantial recovery rate—meaning minimal subsidization and low defaults—gives young persons the ability to invest in their own futures and can provide revenue to higher education that, in absence of the borrowing, would presumably not be there at all. With the worldwide spread of cost-sharing stemming from the increasing inability of governments and taxpayers to assume all of the costs of higher education, the ability of students to bear a portion of these costs, but to defer actual payment until they are out of the university and earning income (and presumably a higher income than they would have been earning in the absence of their higher education), both enables participation that might be impossible in the absence of the borrowing and also provides a third source of revenue to supplement contributions from governments / taxpayers and parents.

Borrowing is particularly necessary in the absence of (or to supplement insufficient) parental contributions. This lack of sufficient parental contribution may be the obvious consequence of low family income, or of the parent's disinclination to

provide further financial support, or of the student's disinclination to be financially dependent on his or her parents—all of which reasons are more compelling the older the student and/or the more advanced the degree. Or, as in the Nordic countries, the absence of any officially expected parental contribution as the prevailing socio-political norm along with the inability of the government to provide full cost-of-living subsidies in addition to free higher education for all students requires the costs of student living to be born by the students themselves through borrowing. Finally, the family may be given the option of a deferred contribution from the student (that is, a loan) or an up-front payment by the parent, as is provided in Australia, New Zealand, and as of 2006, the UK.

There is a large literature on student loan programs (Woodhall 2002, Johnstone 2005a). For the point of this chapter, which is to document the financial fragility of higher education worldwide, student loans are both an essential as well as a problematic source of revenue. They are essential in that they can at least potentially provide much needed supplementary revenue for the institutions as well as for student living expenses. But they are problematic both in their general political unpopularity and in their unreliability in many countries as a substantial and consistent source of revenue. The unreliability as an income source comes from three essential properties of student borrowing: (1) the high risk of default (exacerbated by the absence of collateral), (2) the inherently costly nature of small loans that require long repayment periods and high administrative expenses; and (3) the tendency of very many governments—for political purposes—to build in insufficient interest charges to cover the true initial cost of money even if defaults are contained. In fact, only the United States and Canada have sufficiently minimal subsidization and sufficiently low default rates that their student loan programs provide a substantial true recovery rate.

In short, students will almost certainly grow in importance as a source of revenue for both instructional and necessary living costs. However, a likely growing political and practical resistance to the very high debt loads that are emerging in countries like the United States, Canada, Sweden, and Japan, where borrowing is a real source of non-governmental revenue for the rising costs of higher education, and the political and technical difficulties that most low- and middle-income and transitional countries have experienced in obtaining a decent recovery rate probably mean that the student as a source of higher educational revenue, while important and not likely to become any less so, is also not likely to lessen significantly the financial fragility of colleges and universities worldwide. In the United States, where the student share of higher educational instructional costs is arguable the highest of any country in the world, the currently high debt loads plus the extent of part-time (and even full-time) employment may be nearing a limit: not likely to diminish, but neither able to absorb a significant additional share of higher education's rising instructional costs.

3. Parents. Parents as an effective revenue source for college and university expenditures vary in significance by country, partly according to prevailing levels of personal, or per-capita, income, but more so by culture and tradition, often enshrined in framework laws or even in constitutions that either permit, constrain, or forbid the charging of tuition fees (Marcucci and Johnstone 2003). Within some of the high income /highly industrialized countries of the OECD world, it is assumed that parents have an obligation—in so far as they have the means—to contribute towards the higher

educational expenses of their children, including both the necessary living expenses of lodging and food (frequently by keeping the college-age dependent child at home) as well as whatever portion of underlying instructional costs are to be borne by tuition fees. However, tuition fees are significant (i.e. in the range of 25 to 35 percent of per-student public undergraduate instructional costs) only in North America and Japan, albeit of a lesser but slowly growing importance in a few European countries. But officially expected parental contributions toward the underlying costs of instruction are still very low or non-existent in most of Europe. Parents are expected to cover only the food and lodging costs in Germany and France (although more students in France live at home), but parents in Scandinavia are officially responsible for neither the costs of instruction (that is, no tuition fees) nor the costs of student living (borne by the students themselves via loans). Higher education is still supposed to be “free” in Russia and most of the newly independent states of the former Soviet Union as well as the formerly Communist countries of Central and Eastern Europe. However, because there is not sufficient tax revenue—and because there are huge competing demands for the little revenue that there is—governments in these countries have found a loophole, the *dual tuition* policy, whereby a limited number of spaces are designated as ‘government-sponsored, or tuition free, are allocated by competitive entrance exams and the rest of the spaces opened to fee-paying or *privately sponsored* students—all the while permitting the government still to claim to be complying with the law and providing higher education free-of-charge.⁸

In the United States, while rising tuitions have become a widespread concern and a growing political issue, the continuing strong demand—at least on the part of parents in the upper half of the US family income distribution—for much more expensive private higher education in spite of an abundance of lower-priced, equivalent quality public alternatives suggests that parents will continue to be a strong partner in the sharing of higher educational costs. However, even in the United States where parents are used to bearing a heavy cost for their dependent children’s undergraduate degrees, the costs of student living—that is, lodging, food, clothing, entertainment, transportation, and incidentals—are already in the range of \$8,000 to \$12,000 a year for students who live away from home, *before any tuition or fees*, leaving limited capacity in most families for any substantially increased parental contributions. The concern on the part of most higher education policy analysts in the United States is not for the relatively affluent family, whose ability to pay a substantial tuition fee for their children’s college or university seems quite inelastic, but rather is for the middle, lower-middle, and lower socioeconomic families, whose inability to meet the rising costs of both tuition fees plus the other costs of student living seems to be contributing to excessive student borrowing, excessive student employment, and either unwillingness or inability to attend the college of their choice.

4. Other Revenue Sources. In countries that are suffering from the faltering revenues of governments or taxpayers and that are also finding little reliable fiscal relief from tuition fees (whether *up-front* from parents or *deferred*, from students), it is tempting to try to close the revenue gap through the sale of university services and products: that is, to seek corporations, foundations, and government agencies that might purchase research through grants and contracts; individuals and insurance companies that might purchase medical services and hospital care; or individuals and corporations that might purchase special training in return for tuition fees. These sources in the wealthy

countries account for considerable revenue, particularly for larger research universities, and especially for those with academic medical centers. But where such volumes of revenue are forthcoming, the universities earning such revenue are also incurring enormous additional costs from the activities that generate the revenue from grants, clinical services, and special classes. Moreover, it is not clear that these entrepreneurial activities will be able to generate enough of the *additional* revenue that is needed to help cover the escalating costs of those parts of the university that do not bring in much, if any, of their own non-governmental revenue. Also, philanthropy, while of enormous importance to many (by no means to all) US colleges and universities, both private and public, requires not only great (and unevenly distributed) wealth and favorable tax laws, but requires a tradition and a culture of giving that is simply not present in most other countries of the world—especially in the parts of the world where higher education has for so long been thought to be the fiscal responsibility of governments and taxpayers (Johnstone 2005d). Thus, all of the other-than-governmental revenue sources are also constrained. While cost-sharing—that is, the shift of the higher educational cost burden increasingly to parents and students—as well as philanthropy and the entrepreneurial activities of colleges and universities are on the increase in almost all countries, the worldwide trajectory of higher education revenue—for most colleges and universities, and for most multi-campus systems as well as for most national higher educational ministries—is likely to remain at best barely sufficient (and more frequently decidedly insufficient) to meet the combination of high and rising per-student costs plus the costs of expanding enrollments.

Governmental Policies and the Financial Fortunes of Public Colleges or Universities.

The financial effect of system- or country-wide enrollment pressures upon public colleges and universities depends mainly on the degree to which increasing enrollments will also bring increasing revenue—either from the state, as in full-time equivalent enrollment (FTE) driven budgets or from tuition fees—sufficient to cover at least all of the additional, or marginal, operating costs of the additional enrollments.⁹ From an international perspective, this relationship between increasing enrollments and increasing net revenue to public institutions depends on two political decisions of the relevant government (whether a national or federal government, or the government of a state or province): (1) to charge or to increase—or to allow the public college or university itself to charge or to increase—a tuition fee sufficient to cover the marginal costs of expanded enrollments; or (2) to increase—or to fail to increase—the underlying tax-originated revenue to the operating instructional budget more or less proportionally to the increase in enrollments. Much of what this chapter has claimed to be the underlying default condition of financial fragility of public higher education throughout the world is due to one or more of the following governmental actions (or inactions) with respect to the connection between expanding enrollments and revenue:

- a failure to increase governmental revenues in proportion to the underlying per-student, and/or total institutional cost increase of the expanding enrollment (common in US public colleges and universities as well as institutions throughout the world);

- a failure of government to allow institutions to charge a tuition fee at all (e.g. as in most of Europe, Africa, and in much of the former Communist world) or to allow a tuition fee increase commensurate with the legitimately underlying cost increases (common in US states in response to real or imagined political pressures against tuition increases—frequently until the pressure to allow an increase gets too great, then followed by a vary large single year increase that causes considerable student hardship);
- allowing a tuition increase but decreasing the governmental appropriations commensurately; and
- an insistence by government that institutional e enrollments be increased even in the absence of the requisite additional resources to accommodate them (e.g. as in the continental European universities where university admission is an entitlement to all academic secondary school graduates).

The impact of government on the financial condition of public colleges and universities is not limited to the effect on the trajectories of revenue. Governments can also be responsible both for some of the cost pressures, as well as some of the constraints on the ability of the college or university to deal in the most effective fashion with a cost-revenue squeeze. For example, the ability of the college or university administration to shed staff in low priority areas is limited not merely by the traditional academic tradition of tenure, but frequently by far more restrictive civil service-type laws that guarantee job security to all staff—academic and non-academic—even without the extensive probationary periods and rigorous selectivity common in most US colleges and universities for the granting of tenure. Other laws and regulations, prevalent in states like New York where public universities are not public corporations but are more akin to state agencies, may limit the ability of college or university management from executing contracts, transferring or carrying forward unspent funds, or making appropriate investments in (i.e. borrowing for) new academic ventures (Johnstone 1999).

Faculty and staff throughout much of the world (including in some US states such as New York) are civil servants, frequently covered by extremely expensive pension and benefit arrangements that have been wrested from governments by politically powerful public unions. If the faculty and staff are the equivalent of US Civil Service, their compensation and sometimes even terms and conditions of employment may be established not by the university but by the government (of the country or of the state or province) with little regard for the ability of the institution's budget to cover the costs and to leave some available funds for essential non-personnel expenses such as equipment, facilities maintenance, library expenditures, assistance to students and the like.

In short, while a fundamental cause of the financial fragility of higher educational institutions in the US and other countries is insufficient revenue (or *insufficiently increasing revenue*) from governments or taxpayers, this fragility is also worsened (again, in very many countries) by governmental policies that constrain colleges and universities from helping themselves. The *hopeful* significance of this point is that there are essentially costless solutions to these problems or limitations: that is,

policy solutions that do not take away revenues from other appropriately higher priority public needs.

The Relative Financial Strength of the US Public College or University

Having made the point that financial fragility is endemic to all or most colleges and universities in the world, including those in the United States, let us now look to some of the factors that make the US (public) college and university—in spite of all of the aforementioned financial strains—generally more financially robust than colleges and universities in other countries.¹⁰ There are five special factors that make them so:

1. *Substantial and continuing levels of tuition support*

No country in the world comes close to matching the United States in the amount of tuition fee revenue that is collected for its public universities—successfully, consistently, and with relatively little political dissent. In the latest year for which the US National Center for Education Statistics higher educational financial data were available, which is 1999-2000, US public research universities collected tuitions and fees in excess of \$15.5 billion—a figure that, in light of the substantial tuition increases of recent years, is probably in 2006 in the neighborhood of \$20 billion (National Center for Education Statistics 2002, Table 334). According to the annual poll of the College Board, the average tuition and fees at public four-year colleges and universities in 2004 was \$5132, and the average of the public research universities would have been considerably higher (The College Board 2004).

Three factors, in turn, contribute to this quite extraordinary level of tuition fees in the US public sector. The first is simply the widespread cultural acceptance by parents of the appropriateness of contributing to the costs of their children's higher education, including contributions to the costs of instruction (that is, tuition fees) in amounts ranging from a low of around 25 percent to a high of nearly 40 percent of actual per-student costs of instruction for in-state undergraduate students of public colleges and universities. This acceptance is in part due to the dominant historic role played by the largely tuition-dependent private higher education sector in the United States: that is, many parents either paid themselves—or their parents paid—for a private higher education, or at least know someone who has paid, such that even if they are to complain about the high and rising cost of tuition in what used to be a very low tuition public college or university, most parents of public college or university students believe themselves to be fortunate to be getting a quality higher education for their children at far less cost than their neighbor may be paying for private tuition.

The second factor enabling such high public tuition fees (at least relative to other countries) is the existence of an extensive and successful system of need-based grants and generally available student loans totaling in the 2003-04 academic year some \$114.5 billion—most of it need-based (The College Board 2004). This extensive financial assistance reinforces the belief that all young people otherwise prepared for a higher education should be able to attend some public college even if their parents are unable to afford any financial support.

A third factor allowing the ready acceptance of public sector tuition fees in the United States when they are such a political *third rail* in many other countries is the fact

that public higher education in the United States is the province of the fifty states rather than the federal government. This tends to keep the issue of tuition fees—as politically volatile as it may seem to be to some Americans—essentially off of the national political table (as opposed, for example, to such matters as national health insurance, social security or a federal minimum wage). For that same reason, and reinforcing the relative de-politicization of the tuition fee issue, there has never developed in the United States the kind of politically influential national student union typical of the UK and other European countries for which matters of tuition fees are the dominant issue and can even come to dominate the national political agendas.

2. *Philanthropic support*

A second factor for the relative financial strength of the US public higher educational institution is the relatively new and quite extraordinary strength of *public university philanthropic support* (Johnstone 2005d). US higher education received some \$23.9 billion of philanthropic support in fiscal 2003. What is especially significant to the relative financial health of the US public sector is that more and more of these philanthropic dollars is going to public colleges and universities. For example, nine of the top twenty university recipients were public universities or public university systems. Furthermore, there were in 2004 some 24 multi-year capital campaigns with goals in excess of one billion dollars, 13 of which were at public universities or systems. Finally, of the 39 institutions of higher education in the United States with endowments in excess of 1 billion, eleven of these endowments are held by public universities or university systems.¹¹

3. *Governmentally funded research*

A third factor accounting for the relative financial strength of American higher education—particularly the public (and private) research university—is the support of basic governmentally funded research *through universities rather than through stand-alone research institutes*. The channeling of most governmentally supported basic research in the United States through universities rather than through the kind of stand-alone research institutes found in, say, France (*Centre National de Recherche Scientifique*), Germany (*The Max Plank Institutes*), or Russia (*the Academies of Science*) has been an extraordinary source of financial strength to US research universities, both public and private. The granting of most of this support through limited term, peer reviewed grants has almost certainly sharpened the productivity of US university researchers. And the policy of awarding full indirect costs, while adding to governmental costs, has made all universities financially able to compete on a level playing field and is the major reason for the competitive success of the US *private* research university.

4. *Cost-effective pedagogy*

A fourth feature that contributes to the relative efficiency of American colleges and universities—and thus to their relative financial robustness—is a *generally cost-effective pedagogy*. This assertion is contrary at least to the conventional wisdom of American politicians and journalists, who more generally portray the US colleges and universities, public and private alike, as anything but cost-effective. In further support of the contrary notion, the American institutions by international comparison spend lavishly. However, much of that which seems lavish in comparison to colleges and universities

elsewhere is in the arena of student services: student activities, advising and counseling centers, intramural and intercollegiate athletics, residential campuses, and (by international standards) well maintained buildings. Most US faculty, and especially university faculty, are paid well (again by international standards) in part because American colleges and universities are intensely competitive, and compete in part by salary offers—impossible in countries with national salary scales.

But the assertion of the relative US instructional cost-effectiveness refers mainly to the fundamental underlying production function of the typical American research university: essentially the combined scholarly and pedagogical output or effectiveness per faculty member. The *scholarly* cost effectiveness of the US public research university is high in part because of relative rigor of the promotion and tenure policies and the competitiveness of the top American universities, public and private. The *instructional* cost-effectiveness is due to several factors that are found in most American colleges and universities and only to a lesser extent, if found at all, in institutions elsewhere. These include:

- the undergraduate teaching mode in most large universities of the large lecture supported by smaller discussion sessions led by graduate teaching assistants;
- the requirements of papers and other independent out-of-classroom learning assignments that encourage substantial self learning;
- the bachelors degree being awarded on the basis of successful passage of 30 to 40 or more course modules, which in contrast to the still prevailing (although waning) European system keeps students working throughout the semester instead of merely cramming for year-end examinations; and
- the resulting institutional mobility of the US student which, in combination with the fierce competition for the “best” students, motivates the American public research university to attract and retain even their undergraduate students in a way not found in the European university.

It is true that both faculty loads and student faculty ratios are higher and compensation generally lower in colleges and universities outside the United States—which to some suggest a high level of efficiency. However, while it is possible to label a Russian or an Italian or Spanish university “productive” on the basis of very high student faculty ratios, such universities are not necessarily truly *efficient* based on the amount and quality of scholarship and learning per faculty member. Thus, in spite of the popular and political misconception of public universities as both ineffective and inefficient, it is at least arguable—*based on real scholarship and learning added*—that the US public research university is more pedagogically cost-effective than it is generally given political credit for, and more able than most colleges and universities elsewhere in the world to withstand the inerrant financial fragility that we have portrayed in this chapter.

5. Sector diversity and the viability of non-university options

A fifth and final feature of US higher education—this time of the American higher educational *system*—that contributes to its financial strength relative to systems in other countries is its relative sector balance: specifically *the extent of academically attractive but significantly lower cost collegiate (or non-university) alternatives to the*

high cost research university. One of the cost drivers in most countries is the insistence of virtually all students on direct entry from secondary school into the high cost research university (in spite of the efforts in some countries to channel some students into less costly non-university alternatives). This insistence on university entry is especially the case with academically ambitious students who aspire to advanced degrees or entry into one of the elite professions such as law or medicine. Particularly in the European Continental model, students desiring law or medicine, for example, or a Ph.D. in a discipline have no realistic option other than immediate entry after secondary school into a research university, with all of the attendant per-student cost pressures. Other than France, where the *Grandes Ecoles* are fully respectable (although no less expensive) alternatives to the university for the most academically talented secondary school graduates, in no country other than the United States does the academically talented and ambitious student have good non-university alternatives.

Although not contrived for the express purpose of facilitating a less costly alternative, one of the most distinctive features of American higher education is the nearly total separation of the undergraduate bachelor's degree from graduate and advanced professional degrees. Only in America, then, can the most academically talented and ambitious secondary school student begin at a *non-university* institution (admittedly, frequently at an academically elite college) and still aspire to an academic program and a career in medicine, law, business, or the academy itself. It is even possible in the United States to enter a minimally selective two- or four-year college—at great financial savings both to the family and to the taxpayer—and transfer after several academically successful years to a research university as an upper division undergraduate, or to a more prestigious baccalaureate college and then to a university for graduate or advanced professional work. Thus, although US colleges and universities are very aware of their place in the myriad of institutional rankings, and while institutions and individual faculty almost always aspire to be (and especially aspire to be perceived by others to be) a little more academic and scholarly, this does not mean that most four-year colleges expect or even necessarily want, to transform themselves into research universities. In fact, while *academic drift* will always be present and needs always to be curbed, the United States may have one of the most institutionally and sectorally diverse systems of higher education in the world. And to the focus of this section, this sector diversity clearly takes some of the enrollment pressure—and in so doing a good deal of financial pressure—off of the most costly form of higher education, which is the research university.

Lessons for US Higher Educational Leaders Coping with Financial Fragility

This chapter has examined the endemic financial fragility of colleges and universities through two lenses. This first has been an international perspective, seeking insight from an examination of the financial conditions and trends of colleges and universities elsewhere in the world. The second has been the dual perspective of the *institution* and the *system*, with multi campus systems—not unlike entire countries—facing different and sometimes even conflicting problems as well as different policy tools than single institutions. Many of the system problems stem from the need to accommodate increasing system- or country-wide enrollments and the need to balance a number of conflicting pressures (including political pressures) such as institutional

autonomy versus system integrity, or the institutional need for robust and consistent cost-sharing versus the political and social need to enhance more equitable higher educational participation.

Although the topic is large and complex, and although the ambitions of this chapter are undoubtedly overreaching, a few lessons emerge from these two perspectives and provide the pretext for a summary. We present four:

1. ***Tuition fees.*** The critical importance of *cost-sharing*, or of *other-than-governmental-revenue*: in particular of a consistent stream of dependable tuition revenue. Obviously, tuition fees must remain the principal source of revenue in the private sector. However, particularly in light of the faltering reliability of governmental revenue, tuition fees can be just as important (at least at the margin) in higher education's public sectors. What is most important to the maintenance of institutional financial viability is less the level of the tuition fee or even the aggregate amount of net tuition fee revenue at any particular point in time, but rather that the fee be allowed to increase over time in accord with the necessary and inevitably increasing costs. A tuition fee that is frozen—most often for strictly political reasons—can seriously aggravate the financial fragility of a college or university.
2. ***Cost-side solutions:*** While we have portrayed financial fragility as the default condition of most colleges and universities worldwide, and while we have stressed the paramount need to buttress what we have termed *faltering revenue trajectories*, and while the alternative cost-side solutions (cutting, restructuring and reallocating) remain painful and unpopular, these *cost-side solutions* must nonetheless remain very much on the policy table of ministries and multi-campus systems. Fond hopes for increased revenues from philanthropy, sponsored research, and additional enrollments of tuition-paying undergraduates may be the right aspirations—and they are all more pleasant to “lay upon the institutional planning table.” But they are all problematic for the majority of colleges and universities, public and private, in the United States and worldwide. As difficult as the cost-side solutions may be, some (and in some instances most) of the cost-revenue gap for most institutions must come from reallocation and selective cuts. And system or ministry leadership must take the lead.
3. ***The access agenda:*** The agenda of widening participation and promoting higher educational access among populations hitherto underrepresented (the poor, the rural, the ethnic and linguistic minorities, and women) is an agenda that requires system advocacy and oversight. In spite of the widespread American perception of the academy as liberal, or politically left (which is by-and-large true), universities worldwide are highly meritocratic and frequently not well suited to provide the kind of tertiary-level education wanted and needed by most youth. System-level leadership—either in the US form of academic leaders chosen by system governing boards, or in the more prevalent worldwide form of higher educational ministers and their staffs—must carry much of the responsibility to advocate for the requisite resources and to execute the appropriate policies and programs of an access agenda.
4. ***Institutional diversification:*** System or ministerial leadership must curb the inclinations of college and university leaders (including faculty leadership) to compete for places only on the dual hierarchy of scholarly prestige and student

selectivity. There must be room for excellence on other—less costly—dimensions of quality such as teaching, student retention, community service, professional growth, and the like.

In summary, financial fragility might be higher education's default condition. But this does not mean the condition is without solutions.

References

- Baumol, William J. and William G. Bowen (1966) *Performing Arts: The Economic Dilemma*. New York: The Twentieth Century Fund.
- Bowen, William G. (1968) *The Economics of the Major Private Universities*. Berkeley: Carnegie Commission on the Future of Higher Education.
- Chapman, Bruce and Chris Ryan (2002) "Income Contingent Financing of Student Charges for Higher Education: Assessing the Australian Innovation" in Maureen Woodhall, ed. *Paying for Learning: The Debate on Student Fees, Grants and Loans in International Perspective*. Special International Issue of *The Welsh Journal of Education*, Vol.11, No. 1, 2002, pp. 64-81.
- The College Board (2004) *Trends in Student Aid 2004*. New York: The College Board. [Available on line at <http://www.collegeboard.org>.]
- European Higher Education Area (1999) *Joint Declaration of the European Ministers of Education*. Bologna (the Bologna Declaration), June 19, 1999.
- European Centre for higher Education, *Higher Education in Europe* (2005) a special issue on *The Bologna Process: Retrospect and Prospects*. Vol. 30, No. 1, 2005.
- Johnstone, D. Bruce (2005a) "Higher Education Accessibility and financial Viability: the Role of Student Loans," in Tres, Joaquim and Francisco Lopez Segrera, Eds. *Higher Education in the World 2006: The Financing of Universities*. Barcelona: Global University Network for Innovation (GUNI) published by Palgrave Macmillan, pp. 84-101.
- _____ (2005b) "Financing Higher Education in the United States: current Issues," in Tres, Joaquim and Francisco Lopez Segrera, Eds. *Higher Education in the World 2006: The Financing of Universities*. Barcelona: Global University Network for Innovation (GUNI) published by Palgrave Macmillan, 2005, pp. 232-243.
- _____ (2005c) "Fear and Loathing of Tuition Fees: An American Perspective on Higher Education Finance in the UK" *Perspectives*, 9:1 January, pp. 12-16.
- _____ (2005d) "A Political Culture of Giving and the Philanthropic support of Public Higher Education in International Perspective," *International Journal of Educational Advancement*, Vol. 5, No. 3 2005, pp. 256-264.

- _____ (2005e) "Financing the American Public Research University: Lessons from an International Perspective" Buffalo: University at Buffalo Center for Comparative and Global Studies in Education.
- _____ (2004) "The Economics and Politics of Cost Sharing in Higher Education: Comparative Perspectives," *Economics of Education Review*. 20:4, pp. 403-410, 2004
- _____ (2003a) "The fiscal Future of Higher Education: Austerity, Opportunity, and Accessibility," in *Charting the Course: Earl V. Pullias Lecture Series on the future of Higher Education*. University of Southern California Center for Higher Education Policy Analysis, Fall 2003.
- _____ (2003b) "Cost-Sharing in Higher Education: Tuition, Financial Assistance, and Accessibility" *Czech Sociological Review*, Vol. 39, No. 3, June 2003, pp. 351-374.
- _____ (2001) "Those 'Out of Control' Costs," in Philip G. Altbach, D. Bruce Johnstone, and Patricia J. Gumpert, Eds. *In Defense of the American Public University*. Baltimore: The Johns Hopkins University Press, 2001. [Also in National Center for Education Statistics, *Study of College Costs and Prices 1988-89 to 1997-98 Volume 2 Commissioned Papers*. NCES 2002-158. Washington DC: US Department of Education. 2001.]
- _____ (1999) "Financing Higher Education: Who Should Pay?" in Philip G. Altbach, Robert O Berdahl, and Patricia J. Gumpert, Eds. *American Higher Education in the Twenty-first Century: Social, Political, and Economic Challenges*. Baltimore: Johns Hopkins University Press, 1999 [second revised edition 2004].
- _____ (1998) "Patterns of Finance: Revolution, Evolution, or More of the Same?" *The Review of Higher Education*. 21:3, Spring 1998, pp. 254-255.
- _____ (2000) "The Challenge of Planning in Public," *Planning for Higher Education*. Volume 28, Winter 1999-2000, pp. 57-64.
- _____ (1986) *Sharing the Costs of Higher Education: Student Financial Assistance in the United Kingdom, the Federal Republic of Germany, France, Sweden, and the United States*. New York: College Entrance Examination Board.
- Marcucci, Pamela N. and D. Bruce Johnstone (2003) "Tuition Policies in a Comparative Perspective: Theoretical and Political Rationales." Buffalo: University at Buffalo Center for Comparative and Global Studies in Education.
- National Center for Education Statistics (2002) *Digest of Education Statistics 2002*.
- Richards, Ken (2002) "Reforming Higher Education Student Finance in the UK: The Impact of Recent changes and Proposals for the future" in Maureen Woodhall, Ed. *Paying for Learning: The Debate on Student Fees, Grants and Loans in International Perspective*. Special International Issue of *The Welsh Journal of Education*, Vol.11, No. 1, pp. 18-36.

Woodhall, Maureen, ed. (2002) *Paying for Learning: The Debate on Student Fees, Grants and Loans in International Perspective*. Special International Issue of *The Welsh Journal of Education*, Vol.11, No. 1.

_____. (1989) *Financial Support for Students: Grants, Loans, or Graduate Tax?* London: Kogan Page.

Ziderman, Adrian and Douglas Albrecht (1995) *Financing Universities in Developing Countries*. Washington, DC: The Falmer Press.

_____. (2002) “Alternative Objectives of National Student Loan Schemes in Maureen Woodhall, ed. *Paying for Learning: The Debate on Student Fees, Grants and Loans in International Perspective*. Special International Issue of *The Welsh Journal of Education*, Vol.11, No. 1, pp. 37-47.

Notes

¹ *Systems* refers to sets of institutions—as in the American public multi campus systems (e.g. the University of California System or the Minnesota State College system) or the collective public institutions of a state or a country that are governed by an agency or a ministry with objectives that transcend the welfare of any single institution (e.g. the need to accommodate more students, or to present a particular array of academic programs that a single institution might not necessarily choose).

² The section is taken mainly from Johnstone (2005e).

³ The *units* referred to in *unit costs* are most commonly thought of, at least in the United States, as *student credit hours*, even though these are clearly not true outputs, products, and furthermore the costs per credit hour will vary enormously by institution, discipline, level, and course. However, *student credit hours*, unlike higher education’s true products, are unambiguously measured, and these measures also correspond closely to the ways that the principal revenue sources of tuition fees and state assistance are dispensed. The real *units* of higher educational output, of course, are units of *learning* or of *scholarly product*, but these lack the easy and unambiguous metric of the student credit hour (or its derivative, the *full time equivalent student*). See Johnstone (2001, 2003a).

⁴ A net export balance in higher education means that the country receives many more students from outside the country than it send abroad. The US, UK, Australia, Canada, and New Zealand are all among the top exporters of higher education in the world.

⁵ While shortening the length of the first degree might reasonably be thought to lessen costs, in central Europe where the first degree has traditionally taken the longest (e.g., Germany, Austria, Italy), the per-student instructional costs have actually been exceptionally low because of extreme overcrowding, very large classes, and the absence of any significant student–faculty interaction—and the consequent fact that so many of the students simply do not attend classes. Thus, the move to a shorter first degree, in which *classes* or *courses* in the US parlance become significant, may just as likely to *increase* instructional costs in spite of the theoretically shorter period of instruction.

⁶ Taxes can be direct, as on personal income or sales or property (and so directly felt by the taxpayer), or indirect, as on business and ultimately passed on to people via higher prices. Either way, the purchasing power passes from the general citizen to the government. In a very similar way, a government can effectively acquire purchasing power by the printing of money—which similarly confiscates the purchasing power of the people, but via a deficit-induced inflation rather than a direct or indirect taxation. The “cost-sharing” construct embraces all of these mechanisms under the rubric, *government or taxpayer*.

⁷ Student loan programs exist in some form in more than 50 countries, but most of these are not *generally available*: that is, available to students without co-signatories or other tests of credit worthiness.

⁸ There are obvious equity problems in a system that provides free higher education to a relatively small number of potential students who score the highest on an entrance examination, and requires tuition fees from all the rest—particularly in the absence of means-tested grants and generally available loans.

⁹ We are concerned in this section mainly with public colleges and universities as the private institutions of higher education—while certainly frequently financially fragile—are so mainly because the demand for their relatively high-priced product is insufficient. In turn, this is mainly because of demographics (the relatively low birth rate of the upper-middle and upper socio-economic classes compounded by increasing competition from increasingly upscale public colleges and universities).

¹⁰ While this chapter and this book are concerned as well with financially fragile *private* colleges and universities—and while there are increasing numbers of these in other countries, the policy connections is easier to draw with regard to public colleges and universities.

¹¹ Statistics in this section are from The Council for Aid to Education as reported in *The Chronicle of Higher Education* (various dates) and further reported in Johnstone (2005d).