

# Financing American Higher Education: Reconciling Financial Viability and Student Affordability

D. Bruce Johnstone

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Higher education in America, as nearly everywhere, is beset with financial problems that challenge institutional financial viability as well as student affordability, access, and success. At the heart of these problems lies the seemingly inexorable rise in college and university costs, fuelled by the increasing cost of faculty and staff compensation (in spite of a more than a decade-long stagnation in wages and salaries), by the surging costs of technology, and by the rising costs associated with recruiting, enrolling, and retaining a student body that meets the academic, demographic, diversity, and revenue-producing targets of the institution. At the same time, the price of higher education to students and their families—consisting most visibly of tuition and fees, but also including instructional equipment, food and lodging, transportation, and other expenses such as clothing, entertainment, and mobile telephones—continues to rise, becoming for many students either unaffordable altogether or affordable only with increasingly unmanageable debts,

## Problems, Perceptions, and Issues

Financial austerity in higher education has been around for decades—perhaps forever—quite apart from the impact of any slowdown, recession, or turbulence in the general economy or in state or federal politics.<sup>1</sup> This austerity is a function not simply of higher education's high costs, but of the annually increasing trajectory of these costs, and therefore of annually increasing college and university revenue needs. These increasing revenue needs will in most years outpace the prevailing rates of inflation, and will almost certainly exceed the likely trajectory of available revenues, especially from the state governments—many of which have been disinvesting in their public universities for years and all of which have been shifting more of the burden of support on to parents and students as well as donors.

The juxtaposition of the declining financial condition of higher educational institutions in spite of rising tuitions, together with the declining affordability of higher education, in large part because of these increasing tuitions, has raised many issues for students, their families, educational leaders, politicians, and the general citizenry. At the heart of these financial issues—some of them political and ideological, and intertwined with even larger issues such as income inequality and racial divisions—are critical and long-standing perceptions of the financial condition of America's colleges and universities. These perceptions, most with substantial elements of truth, but all with varying applicability to the enormous diversity of America's colleges and universities, and most with complex explanations that defy simple policy solutions, include many or all of the following charges:

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<sup>1</sup> D. Bruce Johnstone is Distinguished Service Professor of Higher and Comparative Education Emeritus at the State University of New York at Buffalo. This paper was written for a chapter in *The American University in the 21<sup>st</sup> Century: Social, Political, and Economic Challenges*. Baltimore: The Johns Hopkins University Press, 2001, substantially revised for the 4<sup>th</sup> edition to appear in 2016.

- The operating costs of colleges and universities are excessive, and becoming more so.
- The prices of colleges and universities, public as well as private—that is, tuitions—are if anything even more excessive.
- Contributing to these excessive costs—at least in so-called elite and want-to-be-elite institutions—is a kind of *prestige arms race*, driven by academic leaders, faculty and governing boards alike, to move up in the national and international scholarly rankings.
- Also contributing to generally high and rising costs is the reluctance and difficulty of faculty and academic leaders to reallocate resources, to accept labor-saving instructional innovations such as on-line learning, or to reduce faculty and staff numbers (frequently attributed to a combination of shared governance, tenure, absence of clear performance metrics, and unionization).
- These excessive and surging tuitions—whether caused by institutional inefficiencies or by state budget cuts—are putting higher education beyond the financial reach of more and more families, in response to which many students are incurring debts they are unlikely to be able to repay or are being forced to select the lowest cost higher educational option rather than the institution that is *right* for them.
- The combination of rising costs, adverse demographics (in some states), flat or depressed family incomes, and competition from lower priced public institutions is forcing private colleges and universities with less robust applicant pools to discount their tuitions heavily in order to fill entering classes, altering the academic profiles of their entering classes and jeopardizing their financial viability.
- Finally, the combination of state disinvestment in higher education, especially in their public research universities, plus the ability of elite private universities, with their deep and affluent applicant pools, their multi-billion dollar endowments, and their lucrative annual fund raising, is creating a large and increasing resource gap between the top public and the top private universities.

These problems and perceptions raise a number of public and institutional policy questions that are informed, if not always definitively answered, by economic and financial perspectives. For example, how, if at all, can costs—especially to the taxpayer and the student—be substantially lowered (more than they have already been in very many colleges) without damage to academic quality or to principles of access and completion? What are appropriate ratios of students to faculty and to professional and administrative staff at various kinds of institutions? What are reasonable conceptions and expectations of higher educational productivity—and what are the appropriate outputs, or products, and how are they to be measured?

And perhaps the ultimate question, which this chapter will explore, but will not be able to answer: Is the prevailing trajectory of per-student costs rising annually at rates in excess of the prevailing rates of inflation—which many economists have thought to be more-or-less normal in higher education (as in other labor-intensive, productivity-resistant sectors of the economy)—sustainable in the long run? And if not, what sort of *profound* changes in American higher education and the instructional practices of colleges and universities are realistically likely? Such changes, for example, might include: (a) a greater differentiation of university faculty workloads;

(b) a large-scale shedding of non-instructional staff and related costs in such sectors as athletics, public relations, student activities, and general administration; (c) the adoption of three-year bachelor's degrees, perhaps in conjunction with an expansion of college-level learning in high school; or (d) a large scale acceptance of e-learning and credit-by-examination.<sup>2</sup>

The contemplation of such profound solutions leads to other questions: Will the relatively small number of colleges and universities with large endowments and deep and affluent applicant pools continue on their historical cost trajectories and leave such profound, difficult, and controversial changes to the many less fortunate and less selective public and private colleges and universities? Or, will public colleges and universities for the most part simply cope with ever-increasing revenue needs and declining state appropriations by continuing to cut faculty and staff positions, deferring maintenance, shifting ever more of the cost burden onto parents and students, and hoping that generous state appropriations will someday return? And will private colleges and universities continue with the same cost-cutting practices as in the past and hope that creative enrollment management, new market niches, advanced marketing strategies, more aggressive philanthropy, and a continuing influx of tuition-paying Asian students will maintain enrollments and net revenue?

The issue of affordability and the related issues of access, persistence, and completion lead to still other questions: How can enrollment management, or selective price discounting, be used to attract students with qualities or characteristics sought by the institution and still to maximize net tuition revenue? Are taxpayer dollars in the public sector best used to hold down tuition, or should they go toward expanding need-based aid, with public tuitions allowed to continue to rise in recognition of what has been a relatively *price-inelastic* demand for public higher education (at least for many students and families)? Are public aid dollars—limited as they are—best used for grants or for loan subsidies? Should public aid be based on academic promise and performance as well as upon family financial need? And what is the appropriate response by institutions and governments to the pervasive condition of austerity in higher education, whether brought on by declining enrollments, declining state tax assistance, allegations of runaway costs, or—still evident as this chapter is being written in 2015—remnants of the severe economic downturn of 2008-10 that ravaged endowments, state budgets, current giving, and the ability of many families to cover the high and still rising costs of a college education?<sup>3</sup>

### **Economic, Social, and Political Context**

All of these problems, issues, and proposed policy solutions are influenced by perceptions, which may diverge in some cases from reality. For example, perceptions of the financial conditions, troubles, and the appropriate policy solutions for America's colleges and universities may depend on whether the object of the perception is one's own collegiate experience or the experience of a recent child, or is a kind of abstraction, like one's view of government in general, or of public schools, or of health care—all of which (along with many other institutions) seem, in the middle of the second decade of the century, to be suffering from declining civic approval. Perceptions may differ depending on whether the reference is to public or private higher education, to elite and selective, or to affordable and open-access colleges.

Perceptions of higher education's financial troubles may also differ by one's underlying political persuasion, although where one is positioned on a conventional political/ideological continuum, ranging from extreme conservative to extreme progressive/liberal may not predict how one will perceive the problems of American higher education or the appropriate policy

solutions. For example, affluent Americans—themselves likely to be graduates of elite institutions, both public and private, and likely to identify with the political right or center-right—may be critical of what they may perceive to be excessive state taxpayer subsidization of public higher education, but be less critical of the level of the underlying instructional costs themselves, which they may believe ought to be covered by higher tuitions and fewer frills like the costly quest for greater diversity or indulgent curiosity-driven research.

Those who identify with the left or the center-left may be more accommodating to higher taxes (especially if these are to fall on the wealthy or on businesses) and to place a high priority on the expansion of access, which calls for the support of need-based financial assistance and the full state funding of public higher education to forestall higher tuitions. On the other hand, middle and lower socio-economic class Americans may especially resent the rise in public tuitions, which they may attribute in part to politically conservative tax-cutting, but also to too many frills. And middle and upper-middle class Americans alike may resent the costliness of higher education generally, which they see as putting many colleges and universities out of their financial reach and / or burdening their children with excessive debt.

Politicians and the general citizenry may be critical of the well-publicized high tuitions of elite private colleges and universities but may not recognize that the net tuition fee after institutional and governmental financial assistance is generally far lower. Or they may be unswayed in their criticism by the fact that those students and families paying the full price are expressing a private value in the way that value is revealed in any competitive market (not unlike the purchase of an expensive luxury car) and that there is undoubtedly an abundance of lower priced but still high quality colleges they could have chosen instead. Similarly, those who criticize public colleges and universities for raising tuitions at rates higher even than the rate of increase of their instructional costs may not realize (or may choose to not recognize) that the increase may have been forced upon the public institution by state governors and legislatures who have chosen to cut taxes or invest in other public goods and services knowing that another compensating tuition increase will be the end result (even if they decry the increased fees for their political purposes).

Fundamental to the economic, social, and political context is the fact that higher education is recognized both as an engine of economic growth and as a gatekeeper to individual positions of high remuneration and status. Advanced education—particularly in high technology, information processing, sophisticated management and financial analysis—is thought to be essential to maintaining America’s economic position in the increasingly competitive global economy. It follows that most jobs of high remuneration and status will require an advanced education, frequently beyond the bachelor’s degree. And it also follows that youth lacking postsecondary education will probably have lower incomes and marginal status.

These propositions, however, do not mean that advanced education necessarily makes individuals more productive or that all recipients of advanced education will find remunerative, high-status employment. Higher education can make individuals more productive; but it can also simply screen, or select, for the kinds of intellectual, social, and personal characteristics required for the high-remuneration, high-status jobs that may be available. In short, higher education is essential for most good jobs, and the absence of education beyond high school will be an increasingly formidable barrier to obtaining them; but the mere possession of an advanced degree will guarantee neither good, nor lasting, employment.

Complicating the links between higher education, income, and status is the fact that American society is increasingly polarized by class, race, and ethnicity. More and more children grow up in poverty, both rural and urban. The dilemma presented by higher education's gatekeeper function is that access to, and especially success in, college and university remains highly correlated with socioeconomic class. This correlation has not significantly diminished in recent years, even though American higher education is more accessible than the higher education systems of other countries. Thus, with the increasing disparities of income in the decades ending the 20<sup>th</sup> and beginning the 21<sup>st</sup> centuries, and with the increasing correlation of economic success in life to success in college, there is reason to be alarmed at the degree to which our colleges and universities perpetuate, and even accelerate, the intergenerational transmission of wealth and status.

As to the political context, American society, or at least the voting electorate, has become increasingly polarized and conservative. As this chapter is being written shortly after the 2014 capture of both branches of the Congress, and most of the state governorships by substantial conservative majorities, there exists a growing resistance to the notion of a benign government, to the expansion of social welfare programs (including affordable health insurance), and to transfer payments to the poor (including an expansion of Pell Grants). Insofar as there is to be a governmental agenda for higher education, conservatives in 2015 would have it advanced through private, or at least market-oriented, mechanisms such as performance budgeting, tuition tax credits, tuition caps on public colleges and universities (principally to incentivize further institutional efficiencies), merit aid, a continued shift of federal financial assistance from need-based grants to loans, and a disinclination to accept ethnic or racial preferences (i.e. affirmative action) in admissions or in the awarding of financial assistance.

These economic, social, and political themes, for all their complexity, provide a context for consideration of the three broad areas of questions regarding higher education finance in America (or for that matter in in any country):

- *The size of the America's publicly funded higher educational enterprise (including the publicly funded portion of the private sector):* that is, how much publicly supported higher education do we need or will we choose to afford, measured either in total expenditures or as a percentage of our gross domestic product?
- *The efficiency and productivity of this enterprise:* that is, what should higher education, particularly public higher education, cost per-unit (whether the *unit* is to be students enrolled, degrees granted, scholarship produced, service rendered, or combinations thereof)?
- *The sources of revenue to support this enterprise:* that is, who pays (or who should pay) for the costs of higher education as among government or taxpayers, parents, students or philanthropists?

### **The Size of the Enterprise**

The American higher education enterprise is enormous—in number of institutions (especially if the for-profit, non-degree granting institutions are counted), in enrollments, and in expenditures, even controlling for our great wealth and population. For example, the number of degree-granting post-secondary institutions in 2012-13 (the latest count from the National Center for Education Statistics as of early 2015) was 4726, including 689 public 4-year, 934 public 2-year, 1555 private non-profit 4-year, and 97 private non-profit 2-year colleges.<sup>4</sup>

These institutions enrolled some 19.5 million full- and part-time students in 2013 according to the Census Bureau’s household survey data reported in September 2014. This total included 10.5 million undergraduates in 4-year colleges and universities (public, private non-profit, and private for-profit), 3.7 million in graduate and advanced professional schools, and 5.3 million in 2-year colleges. This was down by some 463,000 from previous year and by 930,000 from 2011.<sup>5</sup>

The US Department of Education’s National Center for Education Statistics (NCES), which reports data originating from the institutions of higher education rather than from the household census surveys, reported a fall 2011 total enrollment of 20,894,113 full- and part-time students in all degree-granting institutions. This preliminary total was down slightly from the fall of 2010, but higher than any other previous year.<sup>6</sup> The numbers of institutions by control and level together with the NCES-reported enrollment data are shown in Table 1.

Table 1  
Numbers of Degree-Granting Postsecondary Institutions and Enrollments

	Number of institutions 2012-13	Number of students fall 2011
Public 4-year	689	8,047,729
Public 2-year	934	7,062,467
Private non-profit 4-year	1555	3,887,322
Private non-profit 2-year	97	39,864
Private for-profit 4-year	782	559,080
Private for-profit 2-year	669	397,651
Totals	4726	20,994.113

Source NCES *Digest of Education Statistics*, , Tables 317.10 and 223

Of course, the large numbers enrolled are to a considerable degree a function of America’s large population. A better international comparative measure, controlling for differences in total population, would be the percentage of some age cohort—say, age 25-34—that has attained some level of post-secondary education. By such a comparison, the United States, at 33 percent of its age 25-34 age cohort having attained a bachelor’s degree or the equivalent, is above the average for highly industrialized nations of the Organization for Economic Cooperation and Development (OECD) at 29.5 percent, as well as the percentages for Canada (31.1%), France (27%), Germany (18.3%), Spain (26.2), and Ireland (31.1%), but is behind Australia (35%), Japan (34.9%), Korea (38.9%), Finland (37.8%), and Norway (45.7%).<sup>7</sup>

Although the numbers in the traditional college-age youth cohort will flatten or decline in the years between 2011 and 2022, enrollments were projected by the NCES in 2014 to increase at a modest rate through at least 2022.<sup>8</sup> Absent increasing numbers of college-age youth, the enrollment growth from 2015 to 2020 and beyond will be fed by immigration and students from abroad, increasing graduate and advanced professional enrollments, a continuation of adults retuning to complete studies once abandoned, and a hoped-for increase in high school and college completion, which are two of the more salient reform movements at the local, state, and federal levels in the middle of the 21<sup>st</sup> century's second decade. Table 2 shows the NCES projections from 2014 by public and private (combining non-profit and proprietary, and 2- and 4-year levels).

Table 2  
Projection of US Post-Secondary Enrollments to 2020

	2005	2010	2015	2020	% increase 2010-2020
Public 4-year	6838	7925	8395	8896	12.2 %
Public 2-year	6184	7218	7326	7855	8.8 %
Private 4-year	4162	5410	5684	6073	12.3%
Private 2-year	304	463	450	484	4.5 %
Total	17,487	21,016	21,805	23,309	10.9 %

Source: NCES Projections of Education Statistics to 2022, Tables 22-26, pp. 60-64

Total expenditures for all degree-granting colleges and universities in America were reported by the NCES to be some \$488 billion in 2011-12. This very large and inevitably approximate number was composed of expenditures at all public post-secondary institutions totaling \$306 billion, expenditures at all private non-profit institutions totaling \$160 billion, and \$23 billion for the private for-profit sector.<sup>9</sup> However, such expenditure data, aside from being dated by the time of their compilation and publication, is difficult to portray in any meaningful sense, especially to compare institutional expenditures against some norm. Part of the difficulty, of course, is that college and university expenditures vary greatly by level, or mission, especially as to the role to be played by research and graduate level training and by various practices and institutional *outputs* other than undergraduate instruction. Research universities, for example, tend to pay higher salaries and to require student-faculty ratios that can accommodate research expectations and lower course loads in addition to expensive libraries, laboratories, computational power, and other research-related expenditures. Thus, research universities would normally be expected to spend more per-student or per-faculty member than would 2-year or bachelor's degree colleges.

A second source of institutional expenditure variation arises from the very great institutional variations in wealth—especially in endowments and continuing fund-raising productivity—in part reflecting the affluence of an institution's alumni—as well as the its ability to set and annually to increase tuitions (which in turn is largely a function of the depth and relative affluence of the institution's applicant pool). This expenditure variation reflects Howard Bowen's famous *revenue theory of cost*, which postulated that colleges and universities raise as much revenue as they can and spend all that they raise—seemingly purposefully and for purposes appropriate to their mission.<sup>10</sup>

Still another source of variation in institutional expenditures is the inclusion in some reported expenditure data of amounts spent on activities such as hospitals, auxiliary enterprises (i.e. institutionally-provided food and lodging), and sponsored research, all of which bring dedicated revenue that is not able to be reallocated to instruction or other purposes. Thus, any search for institutional comparisons or for normative expenditure data generally limits the expenditures that are reported to college and university accounting categories such as instruction, academic support, and student services and omits such categories as hospitals, auxiliary enterprises, and sponsored research.

A more useful and at least somewhat comparable portrayal, of American college and university expenditure data from the NCES *Digest of Education Statistics*, would be to show expenditure categories that at least approximate the instructional costs per full-time equivalent student in the NCES reporting categories of instruction, academic support and student services—omitting expenditure categories such as research, hospitals, auxiliary enterprises, and operation and maintenance of the physical plant as shown in Table 3 (bearing in mind that the NCES reporting category of *4-year institution* in both the public and the private non-profit sectors combines and averages data from small bachelor’s degree granting colleges and large comprehensive research universities).

Table 3  
Selected Institutional Expenditures per student  
by institutional level and control, 2012-13

	public 4-year	public 2-year	Private non- profit 4- year	Private non- profit 2- year
Instruction	9398	4500	16,111	6371
Academic support	2514	800	4379	1605
Student services	1455	1091	3964	2671
Total	13,367	6391	24,454	10,547

Source NCES Digest of Education Statistics, 2013 Tables and Figures, Tables 334.10, 334.30, and 334.50

### Revenues and the Sharing of Higher Educational Costs

Total revenues in support of America’s higher educational enterprise, as reported by institutions and as compiled and reported by the NCES, were more than \$500 billion in the latest reporting year (2011-12).<sup>11</sup> They would be well in excess of that amount by the middle of the second decade of the century in spite of serious cuts in state appropriations to public colleges and universities in the aftermath of the 2008 recession (much of which was recovered by increases in tuitions and by federal stimulus funds) and in spite of a considerable, if only temporary, decline in endowments and annual giving. However, revenues in any sort of national aggregate are difficult to report with any precision or interpretive value because of differences in institutional reporting and in the accounts themselves. For example, just as the reporting above on aggregate expenditures omitted such essentially “break even” categories of expenditures as auxiliary enterprises, hospitals and sponsored research, the reporting of revenues from these categories of

operation vary so greatly among institutions even in the same sectors that such data would add little understanding about the financial state of a single institution, much less US higher education in general.

Revenues in support of higher education come from:

- tuitions and mandatory fees (with the difference between what is called a tuition and what is called a mandatory fee quite immaterial to the family);
- payments for institutionally-provided food, lodging, and other
- services such as parking or Internet provision that could have been—and in many colleges and universities are—privatized, or provided by private providers;
- state appropriations to public institutions of higher education (with counties and other local units of taxing authority providing some revenues to community colleges in some states);
- state student assistance(including both need- and merit-based aid);
- federal student assistance (including various grant and loan programs that are mainly need-based and fully portable);
- federal support directly to institutions and programs(principally serving low-income students or minority-serving institutions);
- federal support of research (mainly through universities, both public and private, and generally covering the indirect as well as the direct costs of research);
- returns on institutional investments (including both true endowments that are restricted as to use by donors as well as unrestricted funds from operating surpluses as well as unrestricted gifts that are invested along with endowment); and
- unrestricted gifts to college and university operations that are budgeted solicited, collected, and spent in a fiscal year.

An analytically useful perspective on higher educational revenue is to view the costs of higher education as being borne, or shared, by four principal parties: (1) *parents*, who finance portions of their children's higher educational expenses from current income, savings, or future income via borrowing (as in Federal Direct PLUS loans or home equity loans); (2) *students*, who finance their share from savings, summer earnings, term-time earnings, and future earnings via a variety of governmental and private loans; (3) *government, or taxpayers*, at the state level for the (partial) funding of public colleges and universities and some student financial assistance, and at the federal level for the student financial assistance and research; and (4) *donors, or philanthropists*, including individuals, corporations, and foundations financing certain higher education expenditures through either endowments or current giving.<sup>12 13</sup>

The sharing and shifting among these parties can be a zero-sum game in which a lessening of the burden upon, or revenue from, one party must be compensated either by a reduction of underlying college or university expenditures or through a shift of the burden to another party. Thus, if state taxpayers' share of higher education costs is to be lessened—or even fail to keep up with rising costs—that reduced share must either lead to reduced institutional expenditures or be shifted, probably to students and parents via higher tuition. But if parents cannot pay or have enough political power to limit, by statute or regulation, a higher expected parental contribution (as happened when voter pressure forced Congress to eliminate home equity from the assets considered in determining *need* for the purpose of awarding federal Pell grants), the burden would shift to students, principally through higher debt loads. This scenario—lower taxpayer contributions, reduced institutional budgets, higher tuitions, level

parental contributions, and much higher debt burdens—is exactly what has happened throughout most of the last decades of the 20<sup>th</sup> and first decades of the 21<sup>st</sup> centuries.<sup>14</sup>

A number of policy questions regarding tuitions and financial assistance are sharpened by this *cost-sharing* perspective. For example, what is the appropriate amount that should be expected from parents to cover the higher educational costs of their children? Or, should undergraduate students in America, as in the Nordic countries, be considered financially independent (even if generally impecunious) young adults rather than as financially dependent children? Assuming that the expected parental contribution is to be maintained for both financial and equity reasons, is this share to be a function only of current income, to be met by family belt tightening? Or are parents also expected to have saved from the past or to borrow against the future? Are family assets to be figured in the calculation of need? How long should parental financial responsibility continue—e.g. through undergraduate years only, or until the age of, say, twenty-four or twenty-five? And what is the expected contribution from a noncustodial parent? These are important questions that must be answered in the myriad laws and regulations underlying the federal and state financial assistance programs. But their complexity belies the notion that federal financial assistance is vastly complex and needs only to be simplified to be *fixed*.

### **Tuition and mandatory Fees**

Tuition and mandatory fees in America are high, especially in elite, or highly selective, private non-profit colleges and universities. Tuitions are also high in public research universities, especially compared to what they were before the turn of the last century and compared to tuition fees in almost all other highly industrialized nations.<sup>15</sup> But what has attracted attention and controversy in both the public and private sectors has been less the actual tuitions—even for those at the top of the range—but the yearly increases in tuitions, and especially the fact that these increases have in most years and for most institutions, both public and private, have so substantially exceeded the prevailing rates of inflation, and in recent years exceeded the average annual increases in household incomes. For example, average tuitions and mandatory fees for all private, non-profit, 4-year institutions (which does not reveal the great range within this category) in 2014-15 was \$31,231—up from 2004-05 by almost 24 percent in inflation-adjusted dollars. Public sector tuitions have risen even faster: the average 4-year public institution—which, like the average 4-year private institution, includes a great range of tuitions and tuition increases—rose from an inflation-adjusted \$6,448 in 2004-05 to \$9,139 in 2014-15 for a ten year inflation-adjusted increase of some 41.7 percent.<sup>16</sup>

Tuitions at private institutions are set by their governing boards (in the case of non-profit institutions and by their owners in the case of for-profit institutions) on the basis of market demand within a particular institution's market niche and marketing strategy. For example, most colleges want to be priced close to their competitor's prices: tuitions much higher could lose price conscious families and students; tuitions set too low might suggest either low quality or some reason for losing market share.

A deep and affluent applicant pool not only invites a higher tuition, but allows more tuition discounting in order to enroll a more desirable class—whether the desirability sought is academic brilliance, diversity, athletic ability, or other special talent. A consequence of the great variations in institutional wealth, reputation, and depth of applicant pools is a great variation in private sector tuitions. According to the College Board, the median tuition for the private, non-

profit colleges and universities in 2014-15 was \$32,340. But nearly 17 percent charged tuitions in excess of \$45,000 (before any discounting) and more than 10 percent were able (or forced by the market) to charge less than \$12,000.<sup>17</sup>

Public sector tuitions have also become greatly differentiated as they have been increased in recent decades throughout the fifty states. Public sector tuitions have generally been higher in the Northeast—presumably because of the prevalence (or even dominance) of private colleges and universities and a consequently high tuition expectation among families and politicians alike. The highest public university tuitions are in New Hampshire and Vermont. The median public four-year tuition in 2014-15 was \$9,390. But 17 percent of all students in public 4-year colleges and universities are in institutions that charge tuitions of \$15,000 or higher.<sup>18</sup> In short, it is no longer necessarily the case, as it was in the 1970s and 80s, that most public 4-year colleges and universities were accessible to students from very low-income families as long as they applied for all of the available need-based grants, worked part time during the college terms and saved something in the summer, and were willing to assume some manageable debt.

Table 4  
Tuition & Fees and Room & Board  
Average Published Charges 2014-15

	Public 4-year in state	Public 2-year	Public 4-year out-of- state	Private non- profit 4-year	Private for-profit
Tuition & fees 2014-15	9,139	3,347	\$22,958	\$31,231	\$15,230
Room & board	\$9,804	\$7,705	\$9,804	\$11,188	–
Total charges	\$18,943	\$11,052	\$32,762	\$42,419	–

Source: College Board, *Trends in College Pricing 2014*, Table 1b, p. 11.

Tuitions, mandatory fees, and room and board charges for 2014-15 are shown in Table 4 by public and private, non-profit, 2- and 4-year institutions and for 2-year for-profit colleges. Average institutionally-posted room and board charges are also shown, providing average total charges for these sectors in 2014-15. The actual student and family-borne *expenses*, of course, may be considerably higher than these *charges* when costs of transportation, clothing, entertainment, and incidentals are added. However, these additional expenses are exceedingly variable and may be more appropriately considered costs of living rather than expenses of being a student (even though the student and his or her family may see little difference in the distinction). Even within the average total charges by sector as in Table 4, there is great variation, especially in tuition fees within the 4-year institutions as among the so-called Carnegie classifications of doctoral, master’s, and bachelor’s degree granting institutions. These variations are shown in Table 5.

Table 5  
Tuition & Fees, and Room & Board Charges:  
4-Year Doctoral, Masters, and Bachelors Institutions

	Public			Private Non-Profit		
	Doctoral	Master's	Bachelor's	Doctoral	Master's	Bachelor's
Tuition & fees	\$10,075	7,968	\$7,142	\$39,008	\$27,594	\$29,404
% increase from 2013-14	2.8%	2.9%	3.6%	4.2%	3.4%	3.4%
Room & board	\$10,208	\$9,109	\$9,472	\$12,979	\$10,824	\$10,165
% increase from 2013-14	3.3%	3.3%	3.3%	3.0%	3.4%	3.6%
Total institutional charges	\$20,283	\$17,077	\$16,614	\$51,987	\$38,418	\$39,569
% increase from 2013-14	3.0%	3.0%	3.4%	3.9%	3.4%	3.4%

Source: College Board, *Trends in College Pricing 2014*, Table 1b, p. 11.

### State Appropriations

State appropriations to public colleges and universities have been declining for years, especially those amounts for annual operations (i.e. excluding capital and special appropriations) and controlling for increasing enrollments and inflation. The College Board reported that state appropriations to public institutions of higher education declined by 16 percent in constant 2012-13 dollars from 2007-08 to 2012-13: from \$90.5 billion to \$76.2 billion. Much of this was due to the 2008 Great Recession that devastated state revenues. Although some of this loss was recovered through short term federal stimulus funds, there were many competing calls for these federal funds—and state governments, unlike the federal government, cannot make up for a sudden loss in revenue through borrowing. However, as devastating as the recession may have been on state higher educational appropriations, the decline in support in most states—particularly the failure of appropriations to keep pace with higher education’s inflation index—had been going on for decades, and continues as this chapter is being written in 2015.

State appropriations to programs of financial assistance have also been declining along with appropriations to state institutions. Also significant to the issue of static or even declining accessibility has been the shifting in many states of what may have been predominately need-based aid to forms of merit assistance. The inclusion of merit as a criterion in the disposition of state grants is politically popular, although most analysts believe that it does little to alter student behavior (other than instilling some pride) and may take away from the forms of student assistance that recognize financial need and are more likely to make a difference in accessibility, completion, and choice of college to attend.

State government is still an important, albeit proportionately declining, source of revenue for public colleges and universities in the early decades of the 21<sup>st</sup> century. However, some public research universities, in the face of this declining state tax support and their increasing reliance

on tuition, federal research overhead, and philanthropy to make up for the declining state support, have claimed (partly for rhetorical effect) to be no longer *state supported*, or even *state aided*, but reduced to the status of merely *state located*. A few have even considered asking the state to set them entirely free to be a private corporation (non-profit), requiring no further annual appropriations—but for the state to hand over to the new corporation the physical plant, equipment, land, and other assets of the university, as well as the authority to establish (that is, to raise) tuitions and to execute contracts like any other private non-profit university.

The supposed attraction to the state, especially to some fiscally conservative politicians, is the possibility of further privatization and reduced high educational appropriations (which, in spite of some disinvestment still consume considerable portions of most state operating budgets). The attraction to a few state university leaders—particularly leaders of elite public research universities with very robust and generally affluent applicant pools, including many international and non-resident applicants—is the possibility of charging and annually increasing tuition fees to levels comparable to elite private universities—in addition to being rid of all of the other restrictions and politics that accompany state status. Encouraging this wish for greater independence from state and public system authority is the view that the state support has already dwindled and that the prospect of getting back on the track of state appropriations increasing annually at least at the rate of higher education’s underlying rate of inflation is, at least at the time this chapter is being written in 2015, increasingly dim.

However, the numbers of state colleges and universities with sufficiently deep and affluent applicant pools to match their elite private counterpart tuitions is small. Furthermore, given the increasing political and civic opposition to high tuitions, the accompanying rise in concern over unmanageable student debt loads, and the pressure for greater socio-economic inclusiveness even at highly selective public colleges and universities, those politicians favorable to the privatization of public universities in theory may be reluctant to convert their universities to private corporations. In addition, although the elite public universities have greatly increased their philanthropic successes in recent decades, replacing annual state appropriations, in addition to matching private tuition fees, would require significantly enlarging their fund raising—which they have been working at for years, but which probably cannot be significantly enhanced if potential donors believe that their contributions are going not to enhance their university but to facilitate even further state budget cuts. Even so, it will be difficult to match the annual and capital fund raising records of the elite private universities. (In 2013, the average fund-raising totals of the ten most successful universities—all of them elite private universities—was \$586 million.<sup>19</sup>)

Finally, even with the admittedly declining annual appropriations to public higher education in most states, state support continues to constitute an important—however dwindling—source of unrestricted revenue. Instituting very large increases in tuition and aiming for similarly large increases in annual giving—even if the privatization were to be granted—may be unlikely to replace fully these unrestricted state funds. And public research universities that point to a very small and declining portion of total revenue coming from the state sometimes arrive at that ratio because of a very large volume of non-state revenue from hospital and sponsored research that is neither fungible nor assured into the future. At the same time, many public research universities, along with some public comprehensive colleges that have similarly deep and generally affluent applicant pools, are likely to continue to view higher tuitions and greater autonomy from both the

state and the public multi-campus system as solutions to the deepening austerity brought on by continuing state budget cuts.

### **Solutions on the Cost Side**

If the climate of austerity that continues to pervade much of US higher education cannot be solved entirely on the *revenue side* by ever higher tuitions and waiting for the return of generous state appropriations, colleges and universities, both public and private, will continue to search for solutions on the *cost side* by increasing the efficiency and productivity of the enterprise. The concepts of efficiency and productivity look at both costs, or expenditures, and at benefits, or outputs. These concepts deal with costs *per*: whether *per-student* (which, of course, is not really an output, but which has the advantage of being easily and unambiguously measured), or *per-unit of research* (which is difficult to specify or measure), or *per-unit of learning* (also difficult to measure), or *per-unit of learning added by the institution*. Because the real outputs of the university—e.g., the discovery, transmission, and promulgation of knowledge—are both multiple and difficult to measure, and because revenue, at least for the support of instructional expenditures, generally tracks student enrollment in both the public and the private sectors, the *expenditure per student* inevitably dominates approaches to questions of productivity and efficiency. But we ought never to forget that enrollment—however measured and however sensitive to fields of study, levels of higher education, or methods of instruction—is still merely a proxy for the hard-to-measure real output, which is student learning.

### **Variation in Unit Costs**

In the production of goods, there are usually multiple ways of combining productive inputs—mainly different combinations of labor, capital, materials, and managerial effectiveness—to produce a unit of output. The most efficient combination of inputs is determined by the alternative manufacturing technologies and the relative costs of the inputs. Given a set of input costs and a set of technologies for combining inputs into desired outputs, there generally is an unambiguously *most efficient way*: that is, a lowest cost per unit. The efficiency, then, of any alternative producer or production process can be measured by how that producer or that process compares to that most efficient way.

Higher education is not as fortunate as these goods-producing enterprises. The technology of a university, whether it is producing student learning or scholarly research, is unclear and highly idiosyncratic to the institution, the course, and the individual professor. We know that per-student costs vary greatly. For example, higher education is generally assumed to be more costly at research universities than at undergraduate colleges due to the higher salaries, lower teaching loads, and more extensive academic support (e.g. libraries and computer facilities) accorded the faculty of the research university. However, the direct instructional costs (especially at the margin) at least of freshmen and sophomores at a typical public research university can be rather low due to the prevalence of low-cost teaching assistants and very large lecture courses—in contrast to the typical public four-year college, where most instruction will be carried out by regular faculty in moderate-sized classes, albeit with heavier average teaching loads. In the end, it is probably appropriate to assert that per-student costs even for undergraduates are higher at most research universities than at most four-year colleges, But it must not be forgotten that this is so at least partly because of certain assumptions and cost allocations that, while reasonable, are nonetheless at least in part because things have always been done that way, and may sometimes be questionable.

Among like institutions, most inter-institutional variation in per-student costs can be attributed to differences either in the amenities provided to the students (recreational and cultural facilities, for example, or academic and student services support staff) or in the costs of faculty. Differential faculty costs, in turn, reflect differences not only in salaries—which are low for part-time faculty, who provide much of the teaching at low-cost colleges, and high for the full-time senior professoriate at prestigious private universities and colleges—but also in that other major faculty expense, which is time—which translates into light teaching loads at wealthy colleges and heavy teaching loads at low-cost “access” colleges.

Howard Bowen, in his classic 1980 study of higher education costs, found great variation in costs among seemingly similar institutions with seemingly similar outcomes. Among a sample of research and doctoral-granting universities arranged from lowest to highest in per student expenditures, the average university in the third quartile spent twice as much per student as the average in the second quartile, and the highest-spending university in the sample spent almost seven and one-half times as much as the first quartile average. Variation among colleges was less, but the colleges in the third quartile of per student costs still spent about 50 percent more than the colleges in the second quartile.<sup>20</sup> While Bowen’s data are old, these cost disparities have continued and probably accelerated, as shown above in Table 3.

But even if the definition and measure of *cost* that we use to calculate undergraduate productivity at Harvard were the same as we might use at, say, neighboring Wheelock College or at UMass, Boston, we still cannot say unambiguously that Wheelock and UMass, Boston, are more efficient or more productive than Harvard. They may be *less expensive* per student, to be sure, but whether they are *more efficient* requires a measure of output that we do not have and that we probably could not agree upon. And if Harvard were to contest its possible characterization as *inefficient* or *unproductive*, it would probably point to the extraordinary knowledge and competence of its graduates, or to the lifetime of added benefits that Harvard presumably helped to produce, or the value to the society (uncaptured by private lifetime income streams) that Harvard at least in part produced.

In short, without better agreement on the proper outputs of higher education, not to mention how to weight and how to measure them, we are left with cost per-student (or full time equivalent student) as best as we can measure it, as the dominant metric of higher educational productivity—and as a measure that should presumably get lower (or cheaper) in response to the demands of students, parents, and taxpayers that higher education become less costly.

### **Inflation in Unit Costs**

The problem of unit costs and efficiency (or inefficiency) in higher education is less a function of high unit costs *per se* and more a function of the seemingly inexorable increase of such costs—and of the resulting tuition increases—at rates considerably in excess of the prevailing rates of inflation. This is the *cost disease* described by William Baumol and William Bowen as characteristic of the so-called productivity-immune sectors of the economy, which are generally labor-intensive, with few opportunities for the substitution of capital or of new production technologies for labor. (Among such sectors, for example, would be live theater, symphony orchestras, social welfare agencies, and education.)<sup>21</sup> Unit costs in such sectors generally track their increases in compensation. Because workers in such enterprises (e.g. faculty) typically get the same wage and salary increases as those in the productivity-sensitive, goods-producing sectors of the economy, in which constant infusions of capital and technology

produce real productivity gains and allow unit cost increases to be less than compensation increases, the unit costs in the productivity-resistant sectors will inevitably exceed those in goods-producing sectors. Thus, unit cost increases in higher education will be “above average.” And since the rate of inflation is nothing more than a weighted average of many price increases, it is inevitable that unit costs—and thus tuitions—in higher education will rise in normal years faster than the rate of inflation.

This phenomenon of *rising relative costs and prices* has been thought by many economists and higher education policy analysts to be the normal, or *default*, condition in higher education: unit costs that essentially track increases in overall compensation, which in most years increases at a rate slightly in excess of the prevailing rate of inflation. Tuitions, however, tend to increase at even higher rates, often substantially exceeding the prevailing rates of inflation—and even exceeding the rates of growth in median family incomes. This extra boost in tuitions can be attributed to:

- state governments that continue year after year to shift the cost burden from taxpayers to students and families through lower appropriations and higher tuitions;
- more technology, more course and program opportunities, more costly physical plants, and more amenities that are thought to be essential in order to differentiate a particular college from less costly public or private competitors and that by some measures may lead to a better—but virtually never a *cheaper*—education;
- private colleges that year after year have to put more of their marginal tuition dollars back into student aid or tuition discounts, thus requiring even larger tuition increases to keep up with rising costs.
- compensation increases for faculty and administrative staff that do not merely track compensations increases in the larger economy, but occasionally exceed them; and
- for the most selective and sought-after colleges and universities, both private and public, the opportunity to raise prices in a highly supply-constrained market that exhibits considerable price *inelasticity*.

Thus, the natural trajectory of unit costs in higher education, as described above, is inexorably upward, usually at rates in excess of prevailing rates of inflation. The corresponding rate of increase of anticipated revenues is substantially flatter, if not downward, being dampened in the public sector by the aforementioned cuts in state appropriations and in the private sector by a growing price resistance from middle- and upper-middle income parents—manifested by a shift in demand to increasingly selective public universities as well as by aggressive bargain hunting for more affordable, if still private, alternatives—and in a flattening of federal research dollars and lower returns on most invested funds. The net overall effect is one of *diverging trajectories of costs and revenues*: cost continuing to rise even as most institutions of higher education have been cutting operating costs and deferring maintenance, and as most traditional sources of revenue failing to keep pace.

All of these factors have been at work for most of the past several decades. The result has been a 30 year (1984-85 to 2014) average published tuition increase at private non-profit 4-year colleges and universities of some 146 percent in constant, or inflation-adjusted, dollars. Over the same period, tuitions at 4-year public institutions rose in inflation-adjusted dollars by some 225 percent (of course from a much lower base). And although public 2-year colleges remain the

most affordable alternative, similar factors have worked to increase their average inflation-adjusted tuitions over this 30-year period by some 150 percent.<sup>22</sup>

### **High Tuition-High Aid**

For many years, proposals have been made that direct state funding of public colleges and universities, at least for the support of instruction, be drastically reduced or eliminated altogether, with public sector tuitions raised to full or near full cost and eliminating or greatly reducing what the proponents of this view call the *subsidy* to the students and families of students attending public colleges and universities. In place of direct state revenue, which currently supports anywhere from 50 to 90 percent of public four-year undergraduate instructional costs, proponents of the high tuition-high-aid model would substitute a much expanded program of need-based grants that would diminish as parental or student incomes rose. The grants would phase out entirely for families and students whose income was deemed sufficient to pay the full cost of tuition in addition to other expenses.<sup>23</sup>

The high tuition-high aid model is based on claims of efficiency and equity. The efficiency claim begins with the tenet of public finance theory that any public subsidy of a good or a service that consumers are likely to purchase anyway in the absence or diminution of the subsidy is an inefficient use of public tax dollars. The tax dollars released, if public sector tuitions were allowed to rise (or forced to be raised) would supposedly go toward public needs of greater priority: more need-based student aid, health care, public infrastructure, tax cuts, or public deficit reduction. And if the demand for public higher education should decline as a result of lower subsidies and higher prices, this too might be a move in the direction of a more efficient use of the nation's resources. Subsidies can generate overproduction of a good or service, and a higher priced public higher education might discourage ambivalent, ill-prepared students whom some advocates of high tuition and high aid assume are taking up space and wasting precious resources in our public colleges and universities.

A corollary of the efficiency claim is that there exists, at least in some states, underutilized capacity in the private higher education sector that could be filled at relatively low marginal cost. A shift of tax dollars from the direct support of public colleges and universities to need-based student aid, portable to the private sector, would presumably shift enrollments there and enable the socially optimal level of enrollments to be supported more in the private sector, but at a lower additional net cost to the taxpayer.

The equity argument in favor of high tuition-high aid is based on two assumptions: first, that public higher education is actually partaken of disproportionately by students from middle-, upper-middle, and high income families; and second, that the state taxes used to support public higher education tend to be proportionate or even regressive and thus are paid by many lower middle income and poor families who are unlikely to benefit. Thus, the high tuition-high aid model of public higher education finance is claimed to be more equitable than across-the-board low tuition because it targets all public subsidy only on the needy and imposes full costs on students or families affluent enough to pay.

The case against the high tuition, high aid model rests partly on the oversimplification and political naïveté of the case made on its behalf, summarized above, and partly on the case to be made for the very existence of a public higher education sector. The case against high tuition, high aid may be summarized by four points.<sup>24</sup>

First, a tuition that would recover the full cost of instruction would lead to a full cost of attendance of \$40,000 to \$50,000 or more for a full-time year at a public college or university—even with the prospect of generous financial aid or a lower tuition for those in need. This would almost certainly discourage many from even aspiring to higher education. The total costs to students and parents of a year of full-time study at a public four-year college or university, as shown above in table 4, make many public colleges and universities even today a relatively heavy financial burden for most families and for nearly all independent students. This fact alone does not fully negate the more theoretical arguments of efficiency and equity presented on behalf of full-cost or near-full-cost pricing for public higher education, as summarized above. But even with financial aid, costs at a public college are daunting to many students and their parents, especially to students from low income or otherwise disadvantaged families.

Second, a high tuition-high aid policy would lessen the quality of public colleges and universities. The purpose of high tuition-high aid plans is to reduce state tax revenues currently going to public colleges and universities, even though some proponents claim that this revenue loss would be made up by increased revenue from the much higher tuitions paid by the more well-to-do. Private sector proponents of high tuition/high aid, however, make no secret of their aim to shift enrollments and tuition dollars of middle and upper middle income students (or at least the most attractive and able ones) from the public sector to the private sector. With little or no price advantage left in the public sector; with the resource advantage of large endowments, wealthy alumni, and the tradition of philanthropic support in the private sector; with the patina of elitism and selectivity associated with private colleges and universities (especially in the Northeast); and with greater constraints and burdens remaining on the public sector, many of the nation's nearly 700 public 4-year colleges and universities would become places for students whom the private colleges, now priced the same as public colleges, would not accept. Such erosion in the relative status and quality of public colleges and universities does not seem to be in the nation's public interest.

A third element in the case against high tuition-high aid is that high tuition in of itself does not guarantee high aid. Governors, legislators, and voters, continually pressed by public needs exceeding available resources, are likely to support that part of the public sector in which they perceive that they or their children have a stake. They are much less likely to maintain the financial aid, or tuition discount, portion of the public higher educational budget when it is devoted almost exclusively to the poor. The not unlikely consequences of a policy of high tuition-high aid, rather than the purported enhancements of efficiency and equity, are higher tuition, lower taxes, inadequate aid, diminished access, and deteriorating public colleges and universities.

Fourth and fundamentally, the high tuition-high aid model is a denial of the appropriateness of higher education as a public good. The nation's public colleges and universities have been built and supported over the last century and a half not merely to provide a subsidized education to those who might not otherwise have an opportunity for higher education. Rather, voters and elected officials wanted public colleges and universities that would attract and hold the best and brightest students and scholars, serve society, aid the economy, and be a signal of the state's culture. The high tuition-high aid model essentially denies most of these public purposes to public higher education and substitutes only a public subsidy for those who are too poor to afford what would become an otherwise unsubsidized, expensive, and essentially privatized product. States need to consider whether these continue to be important reasons for supporting public

higher education or whether they mainly want to get needy students into some college, in which case high tuition-high aid is almost certainly, as public finance theory correctly states, less expensive to the taxpayer.

### **Enhancing Productivity on the Learning Side**

As more and more colleges and universities reach a ceiling on enhancing non-state revenue through ever-higher tuition fees and enhanced fund raising, and as they exhaust the obvious cost-side measures for increasing productivity such as cutting staff and closing under-enrolled programs, interest may turn more seriously than it has in the past to increasing higher educational productivity on the learning side. Expressed another way, the major remaining productivity problem in higher education may lie less in excessive cost than in insufficient output—that is, insufficient learning. This could be a function of redundant learning; aimless academic exploration; excessive non-learning time in the academic day, week, and year; insufficient use of self-paced learning; and insufficient realization of the potential of college-level learning in high school. Enhancing the productivity of learning, then, would reduce vacation time and other time spent in other-than-learning activities; provide better advising and incentives to lessen aimless curricular exploration; enhance opportunities for self-paced learning (especially e-learning); minimize curricular redundancy; and maximize the potential of college-level learning during the high school years.<sup>25</sup>

### **Summary and Conclusions**

The financial fortunes of American colleges and universities vary greatly by institutional characteristics. Those relatively few private institutions with large endowments, traditions of generous alumni giving, top scholarly reputations (especially in such fields as bio-medical sciences), and deep applicant pools of desirable student will continue to do well. They will experience the pressures of rising costs—especially for administrative and academic computing, faculty and staff compensation and benefits, the rising costs of libraries and scientific equipment, and the need for scholarship funds critical to attracting, enrolling, and maintaining students with the desired attributes. And they will remain vulnerable to adverse demographics and to occasional downturns in the national economy that may diminish endowments and charitable giving. But they will continue to do well financially.

Public institutions that are similarly situated with deep and affluent applicant pools, with established traditions of philanthropic support, and with research strengths in areas of continuing public investment (e.g., biomedical and applied sciences) may suffer temporary state revenue cut-backs, but will continue to prosper and may gain some market share from the troubles of the less financially fortunate institutions.

Some of the less selective and less endowed private institutions, particularly in small towns or rural areas, may be able to find a specialized market niche, either vocational (e.g. health-related professions) or cultural/ideological (e.g. conservative Christian) and with good management and low faculty costs may also prosper. Many private non-profit colleges and universities, however, will experience a fierce revenue squeeze, primarily driven by demographics: that is, a lack of growth in the number of upper middle class parents able or willing to pay the high tuitions and in the number of students willing to take on increasing levels of debt. They will experience most of the unavoidable cost pressures of their more well-known and better endowed counterparts, but will also experience the added cost pressure (or revenue losses) of the deep discounts required to enroll and maintain a class. Some will alter their historic missions and characters altogether: as

changing from a residential Roman Catholic liberal arts college for women to a co-educational college featuring professional training with large numbers of commuters and part-time adults. Some will experiment with on-line education—although they will find that new entrants with investment capital and without all the costly baggage of a failing traditional college can probably do that better. And a few will explore mergers—but most that do will come to realize that most financially successful mergers are actually take-overs and that a merger of two financially faltering colleges—each trying to preserve as much of its history, mission, and staff as possible—will be unable to shed enough costly staff and outmoded programs to attract the new students it needs.

Most public colleges and less research-intensive universities will continue to experience flat or declining state tax support, forcing higher tuitions, more program closures, and an increasing reliance on part-time and adjunct faculty. Some will attract students who might formerly have chosen a more expensive private college. Some will try to stem declining enrollments with aggressive out-of-state and international recruiting. Many will add advanced professional programs. All will adopt new measures to enhance persistence and completion. And more than a few will close programs and shed staff—even reaching into tenured ranks.

Technology, particularly the Internet, electronic mail, super computers, and cloud data storage has already profoundly affected the way research university faculty and advanced students conduct, collaborate in, and communicate research. On a more uneven but still profound way, advances in instructional technology such as the electronic conveyance of readings and lectures, Massive Open On-Line Courses (MOOCs), the so-called **tipped** classroom, combining on-line lectures with regular seated classes, and other forms of e-learning will enrich teaching and learning in virtually all colleges and universities, but in more financially secure institutions will generally lead to better—but no less costly—student learning. However, such technologies may profoundly alter instructional methodology in learning venues such as proprietary institutions, professional certification and re-certification programs in all colleges and universities, and in the less selective private non-profit institutions that will be under the greatest pressure to slash costs and find new non-traditional market niches.

The shift in cost burden from taxpayers to students will lead to even more students having to seek part-time (and even full-time) employment and incurring more debt—which will stymie efforts to shorten the time-to-degree. Students and families will more aggressively shop for lower cost collegiate options, pushing back on tuition increases in both private and public sectors, but also encouraging such expense-saving arrangements as taking the first two years of a bachelor's degree at a less expensive community college, and electing combined bachelor's-advanced professional programs to shorten the total time (and the debt) required for advanced professional degrees in fields such as law, education, management, and medicine. Marketing will become even more frenzied.

State and federal politicians, including US presidents and state governors, will continue to make well-publicized efforts to *solve the problem*—generally meaning somehow fixing the problems of high tuitions, excessive college and university costs, prolonged time-to-degrees, and / or insufficient graduate job-readiness. The federal government, lacking constitutional authority over education, including public colleges and universities, lacks the necessary authority to alter the underlying instructional paradigms even of public—much less of private—higher education. So there will mainly be more federal studies, national commissions, and Congressional exhortations to reduce expenditures, lower tuitions, and produce more job-ready graduates.

But the federal government does have considerable leverage over higher education, public and private, though its ownership and funding of federal financial assistance programs. Federal efforts to rein in certain practices, mainly at proprietary and community colleges that lead to excessive borrowing and student loan defaults have proven to be politically controversial, but remain very much on the table in the second decade of the century. Efforts to expand the income contingent and other income-based repayment options in an effort to increase the manageability of student debts will also continue, as will efforts to simplify and consolidate the myriad of student aid and loan programs.

State solutions such as tuition prepayment and tax-exempt savings plans as well as various merit aid programs that have been around since the turn of the century, while still politically popular, have generally failed either to alter institutional practices or to increase student access or retention—and have sometimes proven excessively costly. Most state higher education budgets will be flat or smaller, but this reduction will be accompanied in most states by greater flexibility together with performance criteria and incentives, such as premiums to institutions that improve retention and completion rates.

Most institutions have been shaping their missions for years to adjust to more low-income, minority, older, part-time, and place-bound students. Many have been moving in the direction of more applied and vocational programs as well as trimming or eliminating those that are neither excellent nor popular nor central to the institution's mission. In short, much of the vaunted *restructuring* that management consultants and observers of higher education have been calling for as a solution to the continuing financial austerity of U.S. higher education may not be a solution to the remaining financial problems—for the simple reason that it has been going on for years. Most of the smaller and comprehensive colleges have reallocated resources and altered their programs and faculty profiles dramatically; many have changed mission altogether. Some small, non-selective, non-endowed private colleges may close their doors; most will continue to reduce costs and seek new markets.

Also in some financial jeopardy may be those universities, both public and private, largely regional, and with minimal or uneven scholarly reputations, that continue to pursue the research university model but are unlikely to penetrate the top ranks, measured by the scholarly prestige of their faculty or their graduate programs. Here, pressures to control costs are likely to focus on an increasing separation of funding for instruction and research, much as has occurred in the United Kingdom. If these measures are successful, the result could be less indirect public subsidization of faculty scholarship, a widening difference in faculty workloads, and a reduced administration overhead on federal research grants.

As to the widely touted goal of expanding higher educational accessibility and opportunity, and although American higher education probably does more than any other nation to provide postsecondary opportunities to those from low socioeconomic backgrounds, the larger American society, at least as this chapter is being written in 2015, is becoming not only more unequal, but less willing and less able, at either the state or the federal levels, to craft politically acceptable governmental solutions to higher education's financial problems. America's colleges and universities will thus continue, as they have been, to seek new markets, students, and revenues and to trim costs where they can. And financial austerity and attempts to reconcile institutional financial viability and student affordability will continue to be a dominant theme for policy at both institutional and governmental levels.

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## Notes

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- <sup>1</sup> An early and influential report on higher education's austerity was Earl Cheit's *The New Depression in Higher Education: A Study of Financial Conditions at 41 Colleges and Universities*. (Hightstown, New Jersey: McGraw-Hill Book Company). published in 1971 as one of the first reports of the Carnegie Commission on Higher Education. The higher education literature is full of reports on college and university austerity, including (as illustrative) David W. Breneman, *Liberal Arts Colleges: Thriving, Surviving, or Endangered?* (Washington, D.C.: The Brookings Institution, 1994); D. Bruce Johnstone, "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); and William Zumeta, David W. Breneman, Patrick M. Callan, and Joni E. Finney. *Financing American Higher Education in an Era of Globalization* (Cambridge: Harvard University Press, 2012).
- <sup>2</sup> D. Bruce Johnstone, "Public Universities in an Era of Continuing Austerity: More of the Same or Profound Change," *Faculty Senate Bulletin: A Publication of the State University of New York University Faculty Senate*. Fall/Winter 2013-14, pp. 11-14, and at <<http://www.gse.buffalo.edu/org/IntHigherEdFinance>>.
- <sup>3</sup> D. Bruce Johnstone, "The Impact of the 2008 Great Recession on College and University Contributions to State and Regional Economic Growth," in Jason E. Lane and D. Bruce Johnstone, eds. *Colleges and Universities as Economic Drivers* (Albany SUNY Press, 2012).
- <sup>4</sup> National Center for Education Statistics, Digest of Education Statistics, Table 317.10, downloaded February 2015 from [http://nces.ed.gov/programs/digest/current\\_tables.asp](http://nces.ed.gov/programs/digest/current_tables.asp).
- <sup>5</sup> US Census Bureau, "College enrollment Declines..." downloaded February 2015 from: <http://www.census.gov/newsroom/press-releases/2014/cb14-177.html>>.
- <sup>6</sup> NCES Digest of Education Statistics 2012 Tables and Figures, Table 223.
- <sup>7</sup> NCES Digest of Education Statistics 2013 Tables and Figures, Table 603.30.
- <sup>8</sup> NCES, *Projections of Education Statistics to 2022*, p. 19, downloaded February 2015 at <http://nces.ed.gov/pubs2014/2014051.pdf>>.
- <sup>9</sup> NCES Fast Facts, Postsecondary Enrollments, downloaded February 2015 at <https://nces.ed.gov/fastfacts/display.asp?id=75>>.
- <sup>10</sup> Howard R. *The Costs of Higher Education: How Much Do Colleges and Universities Spend Per Student, and How Much Should They Spend?* San Francisco: Jossey Bass Publishers. 1980.
- <sup>11</sup> NCES, *Conditions of Education*, Postsecondary Revenues by Source, Downloaded February 2015 at [http://nces.ed.gov/programs/coe/indicator\\_cud.asp](http://nces.ed.gov/programs/coe/indicator_cud.asp).
- <sup>12</sup> Some consider business a possible fifth party to bear a share of the costs. However, grants from business to higher education are better viewed as either (1) the purchase of a service, in which case the grant should cover the full costs of the added service but would not be expected to bear a share of core instructional costs; (2) a voluntary contribution coming out of owner or stockholder profits, in which case it would fall under "philanthropy"; or (3) a contribution considered part of the cost of doing business to be included in the price of the products and paid for by the general consumer, like a sales or consumption tax—in which case the incidence, or burden, is much like that of other taxes and may be included, at least conceptually, with the "taxpayer" party.
- <sup>13</sup> For the theory of cost-sharing, which has been used mainly in a comparative examination of higher education costs, see, D. Bruce Johnstone and Pamela Marcucci, *Financing Higher Education Worldwide: Who Pays? Who Should Pay?* (Baltimore: The Johns Hopkins University Press, 2010); Johnstone, *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. 1986; and Johnstone, "The Economics and Politics of Cost Sharing in Higher Education: Comparative Perspectives," *Economics of Education Review*. 20:4, 2004, pp. 403-410.

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- <sup>14</sup> Ronald G. Ehrenberg, ed., *What's Happening to Public Higher Education? The Shifting Financial Burden* (Baltimore: The Johns Hopkins University Press, 2006); Katherine Lyall and Kathleen R. Sell, *The True Genius of America at Risk: Are We Losing Our Public Universities to De Facto Privatization?* (Westport CT: Praeger Publishers [ACE-Praeger Series on Higher Education] 2006).
- <sup>15</sup> Tuition fees in publically financed universities in England as of 2014 were comparable to, or higher than, tuitions in top US public research universities. Tuitions in Japanese and some Canadian provincial universities are also roughly comparable. But universities in the Nordic countries remain free, and most of the rest of Europe features public university tuitions that Americans would consider only nominal. See Johnstone and Marcucci, 2010.
- <sup>16</sup> College Board, *Trends in College Pricing 2014*, Table 2A, p. 17. Downloaded March 2015 at <https://secure-media.collegeboard.org/digitalServices/misc/trends/2014-trends-college-pricing-report-final.pdf>.
- <sup>17</sup> College Board, *Trends in College Pricing 2014*, Figure 2 p. 13
- <sup>18</sup> College Board, *Trends in College Pricing 2014*, p. 14
- <sup>19</sup> Don Troop, "Gifts to College Reached \$333.8 Billion in 2013, Topping Pre-Recession Levels, *Chronicle of Higher Education*, Feb. 21, 2014, p. A10.
- <sup>20</sup> Howard R. Bowen, *The Costs of Higher Education* (San Francisco: Jossey-Bass, 1980), 116–19.
- <sup>21</sup> William J. Baumol and William G. Bowen, *Performing Arts: The Economic Dilemma* (New York: Twentieth Century Fund, 1966); also, William G. Bowen, *The Economics of the Major Private Universities* (Berkeley, CA: Carnegie Commission on the Future of Higher Education, 1968).
- <sup>22</sup> College Board, *Trends in College Pricing 2014*, p. 16.
- <sup>23</sup> The case for high tuition, high aid was popularized in W. Lee Hansen and Burton A. Weisbrod, *Benefits, Costs, and Finance of Public Higher Education* (Chicago: Markham, 1969). See also Carnegie Commission on Higher Education, *Higher Education: Who Pays? Who Benefits? Who Should Pay?* (New York: McGraw-Hill, 1973); Frederick J. Fischer, "State Financing of Higher Education: A New Look at an Old Problem," *Change* (Jan./Feb., 1990).
- <sup>24</sup> D. Bruce Johnstone, *The High-Tuition–High-Aid Model of Public Higher Education Finance: The Case Against* (Albany: State University of New York Office of the Chancellor, for National Association of System Heads, 1990).
- <sup>25</sup> For more on the concept of learning productivity see: D. Bruce Johnstone, "The Productivity of Learning," *Journal for Higher Education Management*. Summer/Fall, 1995, pp. 11-17; D. Bruce Johnstone and Patricia Maloney, "Enhancing the Productivity of Learning: Curricular Implications," in James E. Groccia and Judith E. Miller, eds., *Enhancing Productivity: Administrative, Instructional, and Technological Strategies* (San Francisco: Jossey-Bass Publishers 1998 [New Directions for Higher Education # 103]); and Richard Arum and Josipa Boska, *Academically Adrift: Limited Learning on College Campuses* (Chicago: University of Chicago Press, 2011)

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