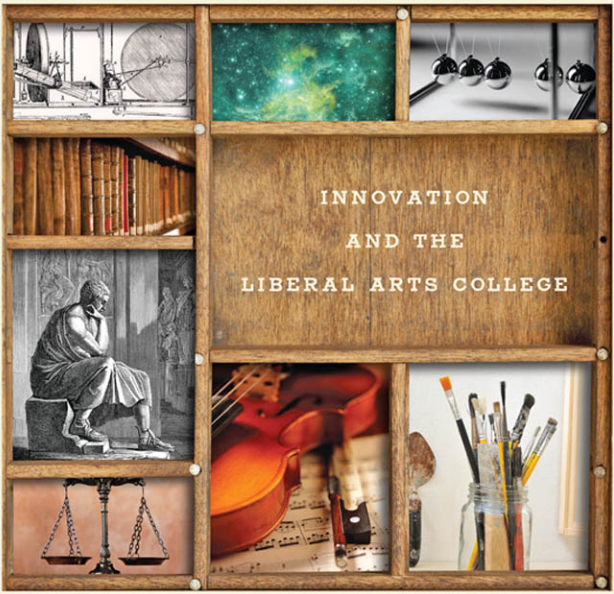
Remaking College



EDITED BY

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Remaking College

Innovation and the Liberal Arts

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Rebecca Chopp, Susan Frost,
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President, Colorado College

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Vice President for Finance and Treasurer, Swarthmore College

At a time when the cost of a college education is rising and household incomes are declining, university and college leaders are faced with some difficult questions about the price and affordability of higher education. Indeed, President Barack Obama emphasized this very point in his 2012 State of the Union address, saying, "Let me put colleges and universities on notice: If you can't stop tuition from going up, the funding you get from taxpayers will go down. Higher education can't be a luxury—it is an economic imperative that every family in America should be able to afford."[1]

How do we propose an effective response to this challenge? One way is for leaders at liberal arts colleges to define and explain the issues. In particular, it is important to recognize that there are more than four thousand institutions of higher education in the United States, including community colleges, public two- and four-year colleges and universities, private non-profit colleges and universities, and a rapidly growing for-profit sector—all with economic models that differ in important ways. While some issues facing these sectors are similar, each faces a variety of unique challenges.

It is also important to remember that many people—including some of the press—do not understand the difference between cost, price, and net price, and yet these distinctions help define the issues facing different sectors and could inform solutions.[2] For some institutions, cost is the main issue and, given other revenue streams, drives price and net price. For other institutions, price is the

main issue as schools push up tuition charges to offset declining revenues from other sources.

We want to clarify some of the challenges facing American higher education generally, and liberal arts colleges in particular, and to propose possible paths forward, keeping in mind the specific issues faced by different types of institutions. We start by presenting data on the higher education sector in the United States and discussing the challenges it is facing broadly. We then present data on a representative selective liberal arts college (based on the data of twelve liberal arts colleges[3]), highlighting the particular challenges of this one segment of American higher education. Finally, we discuss some possible policy responses—some that our sector can adopt, some that would have to be implemented by others (but where we might play a role), and some that could be imposed on us.

The Economics of Higher Education

To understand the new economic reality facing higher education generally, we need to recognize some of the forces shaping higher education in the United States today. An article in the science magazine *Seed* described the current situation succinctly: "Our world is not the stable workhorse we once presumed it to be. Financial markets are inherently volatile; seemingly healthy ecosystems can collapse suddenly; the favorable window of life-supporting conditions that humans currently enjoy is an anomaly in the cosmic history of the planet. Change, sometimes in the form of radical, transformative shifts, is the defining characteristic of our existence."[4]

Applying these ideas to higher education, one could say that the decades before the Great Recession, when we could count on a steady stream of endowment earnings, philanthropy, and tuition increases, were the anomaly, and we are unlikely to see that kind of stability again. Now we are in a period of enormous transition, with institutions trying to do more with less while continuing to make sure that students and faculty receive the resources, support, and encouragement they need. Given that most colleges and universities have streamlined their operations and are doing all they can to ensure access, the next step may be educating the public—especially students, parents, alumni, and boards—of our efforts to support the traditions and values that have made the U.S. system of higher education the gold standard across the world.

Demand and Supply

Higher education is one of the largest industries in the United States and one of this country's top service exports. More than four thousand degree-granting in-

stitutions are spread across the country, educating 21 million students and employing 3.4 million people. Public colleges and universities represent 40 percent of all U.S. institutions of higher education and enroll 76 percent of all college students. Nonprofit private institutions comprise 38 percent of all institutions and educate 15 percent of undergraduates, while liberal arts colleges educate 6 percent of all undergraduates. The growing sector of for-profit institutions (22 percent of all institutions in the United States) now educate 9 percent of undergraduates.[5] Global rankings of postsecondary institutions show that the United States still leads globally with fifteen of the top twenty universities. Liberal arts colleges in particular are emulated throughout the world as interest in "American-style" higher education grows.[6]

Over the last several decades, both supply and demand have shaped the market price of a college education. On the demand side, three trends have led to an increase over the last thirty years. First, the demographic bulge resulting from the Baby Echo-Boom, or Baby Boomlet, led to more high school graduates from 1992 to 2009. Second, despite the fact that the Baby Boomlet has ended, an increase in the rate of those going to college has translated into continued growth. From 2009 to 2020, total enrollment in higher education is expected to increase 13 percent. This enrollment growth will include a 45-percent increase for Hispanics, a 25-percent increase for both black students and Asian / Pacific Islanders, and only a 1-percent increase for students who are white. The enrollment of first-time freshmen is expected to increase 11 percent.[7]

What is motiving this increase in college goers? Likely, it is the increasing value of a college degree. As the U.S. Treasury Department reported in "The Economic Case for Higher Education" (2012), a college graduate earned 64 percent more in 2011 than a high school graduate in median weekly earnings ($1,053 compared to $638). According to the report, today's earnings gap is the highest since 1915, the earliest year these estimates were tracked. Today a college degree is key to economic mobility. In fact, according to one source, "attaining a college degree quadruples the likelihood that a child born to parents on the bottom rung of the income ladder will make it to the top."[8]

Additionally, the unemployment gap between those with a college degree and those without a degree has increased. According to a September 2012 article by Thomas Friedman in the *New York Times,* the unemployment rate was 4.1 percent for people with four years of college, 6.6 percent for those with two years, 8.8 percent for high school graduates, and 12.0 percent for dropouts. Friedman echoes the sentiments of many pursuing the promise of higher education: "If you want a

decent job that will lead to a decent life today *you* have to work harder, regularly reinvent yourself, obtain at least some form of postsecondary education, make sure that you're engaged in lifelong learning and play by the rules."[9] Even in 2008/09, during the worst part of the economic downturn, unemployment for all college graduates remained at 5 percent, a level that economists often consider to be full employment.

And finally, on top of the growing national market for higher education is students' demand to attend the most selective institutions, increasing the relative demand for the top colleges and universities. According to Caroline Hoxby, a Stanford economist, students are looking for schools that offer advantages in terms of both resources and peers. In the past, students were likely "to attend a local college regardless of their abilities and its characteristics. Now, their choices are driven far less by distance and far more by a college's resources and student body. It is the consequent re-sorting of students among colleges that has, at once, caused selectivity to rise in a small number of colleges while simultaneously causing it to fall in other colleges."[10]

Hoxby goes on to show that this integration of the higher education market has not only changed the peer experience for students but has also altered the investment choices of institutions as well as both the tuition students pay and the subsidies they receive. Although tuition is increasing at the most selective schools, students are gaining even more from attending them. Because these institutions are able to direct substantial revenues from large endowments and alumni giving toward the academic program and student services, spending on each student is significantly more than the price of full tuition.

Several factors are also affecting the supply or cost structure of higher education, leading to rising expenses that show no sign of abating. The increasing demand for highly skilled labor that causes people to want a college degree also makes it more expensive to employ such labor. Higher education is one of the most intense industries in terms of the percentage of employees with advanced degrees. And unlike many industries—financial services, for example, where gains in technology have streamlined the labor force—technological improvements in higher education have added to, rather than decreased, costs. For example, in the 1990s institutions wired every residence hall for Internet access; then, less than a decade later, they needed to make additional investments to make the campus wireless. While computers have eliminated the need for typists, they have created the need for IT specialists at a greater expense.

The increasing need for financial aid adds to the economic pressure on insti-

tutions. Financial aid has grown as schools seek out greater diversity in their student populations, an effort that benefits society as a whole and enriches learning in and out of the classroom. As more entering students come from a wider range of racial, ethnic, and socioeconomic backgrounds, institutions are called on to help them with generous financial aid packages and other resources needed to make a smooth transition to college. Financial aid reduces net revenues, while other resources increase expenditures and therefore costs. Many institutions, worrying about the impact of debt burden on students, have substituted additional grant aid for loans for low-income and first-generation students, putting further pressure on financial aid resources.

Rising Tuition

As a result of growing demand, decreasing public appropriations, and rising costs, college tuition has consistently increased above inflation over the past thirty years. As figure 1 shows, since 1981 the average inflation-adjusted tuition and fees at a public four-year institution has gone up 368 percent as compared to 281 percent at a private four-year college. While private institutions remain significantly more expensive than their public counterparts, in the last decade the annual inflation-adjusted tuition increase at private nonprofit four-year institutions was 2.6 percent, compared to 6.1 percent per year at four-year publics.[11]

Why has tuition increased more rapidly at public institutions in the past decade? Because state governments must decrease appropriations when the economy is weak and tax revenues decline, public institutions require tuition increases to maintain quality. For private institutions, on the other hand, tuition tends to increase when family incomes rise.

Declining family income is another trend driving concerns about the rising costs of tuition. While family incomes increased, in real terms, in the 1980s and 90s (with the most significant income gains skewed toward the top of the income distribution), families in all income groups saw their real incomes fall between 2000 and 2010, the "lost" decade (see fig. 2).

Making matters more difficult for students and families is the somewhat confusing issue of gross tuition and fees, or the "sticker price," versus net tuition costs. For example, in 2011 the average sticker price for tuition and fees at a private four-year college was $28,500, but the average price students paid was $12,970. According to one source, that's close to what students paid, on average, in the 2001/02 school year in inflation-adjusted dollars.[12]

It is also important to note that all college students receive a subsidy, not just

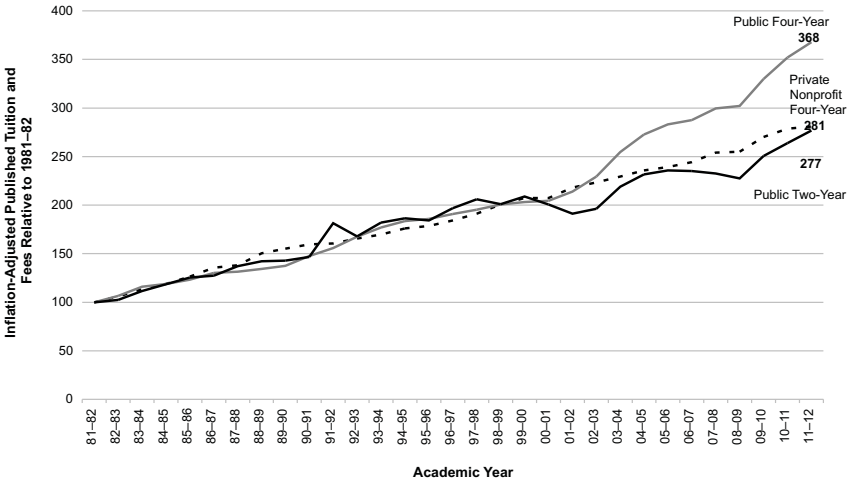

Figure 1. Inflation-Adjusted Tuition and Fees Relative to 1981–82. *The College Board, Annual Survey of Colleges. NCES, Integrated Postsecondary Education Data System (IPEDS), 2012.*

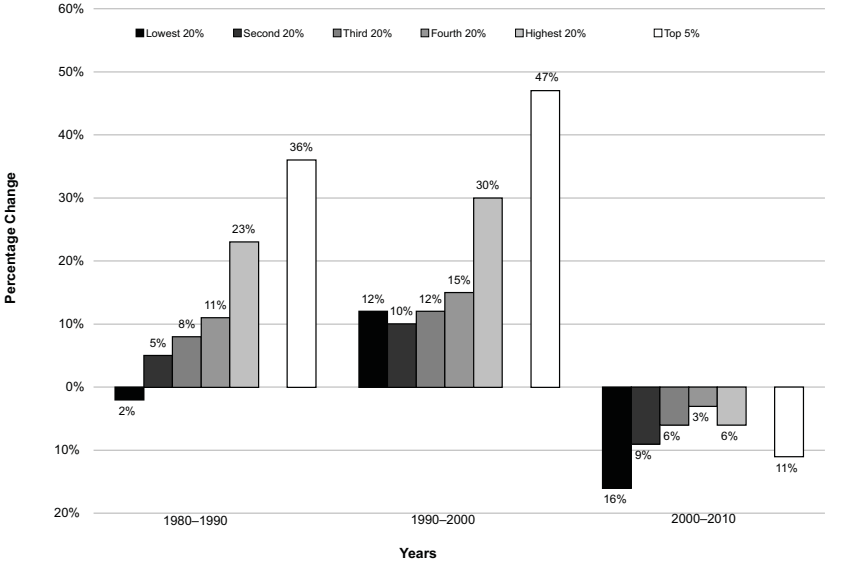

Figure 2. Percentage Growth in Mean Family Income by Quintile in Constant 2010 Dollars. *US Census Bureau, Current Population Survey, 2011, Table F-1, Table F-3, and FINC-01; calculations by authors. http://www.census.gov/cps/.*

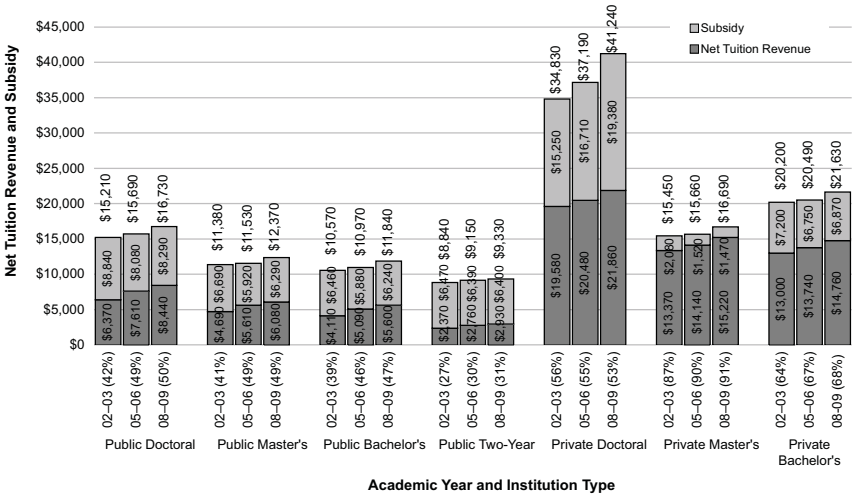

Figure 3. Net Tuition Revenues, Subsidies, and Educational Expenditures per FTE Student in Constant 2009 Dollars. *College Board, Annual Survey of Colleges, 2012.*

those who get financial aid (see fig. 3). So despite the higher "sticker price" of college, the actual cost of educating each student is even greater. This subsidy comes mostly from endowment earnings and gifts in private colleges and universities, and from government appropriations in the public sector. Since the economic downturn, appropriations for public education have declined significantly, and private institutions have seen a decrease in their endowments and annual gifts. As a result, net tuition now covers a higher percentage of total costs in the public sector and at private liberal arts colleges than it did ten years ago.

While the average student in all sectors is subsidized (excluding for-profits, of course), it has been shown that the size of the subsidy is positively correlated with the selectivity of the institution.[13] The averages reported here therefore mask significant differences across institutions. Within the liberal arts sector, for example, the subsidy offered by highly selective institutions with large endowments significantly exceeds that at less selective liberal arts colleges. This link between an institution's wealth, subsidy, and selectivity is at the heart of Hoxby's (2009) analysis of the growing bifurcation between the "haves" and "have-nots" in higher education.

Looking at a Representative Liberal Arts College

As the costs of higher education have increased faster than inflation over the past decade and as family incomes across all quintiles have declined, how have these national trends affected the private liberal arts college sector? To address some of these issues, we created a representative liberal arts college (RLAC) by aggregating and averaging data from twelve institutions: Bryn Mawr, Colorado, Franklin & Marshall, Lafayette, Macalester, Pomona, Sewanee: The University of the South, Smith, Swarthmore, Vassar, Wheaton, and Williams. These institutions were chosen because their presidents or other senior administrators were panelists at The Future of the Liberal Arts College in America conference held in spring 2012.

RLAC's profile in 2009/10 looks like many liberal arts colleges. It has just under two thousand students and a small enrollment increase of approximately 5 percent between 2000/01 and 2009/10. RLAC's student/faculty ratio was 10.8 in 2009/10, and the fictional institution had a budget of $120.1 million. RLAC differs from the majority of liberal arts colleges in its selectivity and its endowment of more than $700 million (compared with the average endowment value of $324 million of 98 small [under 3,000] private institutions with a basic Carnegie classification of Arts & Science).

As was the case nationally with liberal arts colleges from 2000/01 to 2009/10, student charges (tuition and room and board) grew significantly—RLAC experienced a 60 percent increase. Given that family incomes declined in real terms for all quintiles over this time period (see fig. 2), paying tuition at RLAC required a larger percentage of household income in 2010 than it did in 2000.

The average cost per student at RLAC in 2009/10 was $60,201, and the average student charge (tuition plus room and board, or sticker price) was $49,025. Therefore, even students paying full tuition at RLAC received an average subsidy of more than $10,000 per year, mirroring the national data (see fig. 3). While the sticker price of RLAC increased by 60 percent, its financial aid budget more than doubled. The discount rate (the percentage of every tuition dollar given back in financial aid) at RLAC increased from 30 percent in 2000/01 to 37 percent in 2009/10. In addition, the percentage of students receiving aid increased from 56 percent to 60 percent.

The increased expenditure on financial aid over this period (more than 100%) is one explanation for the increase in RLAC's sticker price. But what are the other causes of the increase? First, cost per student, net of financial aid, increased

by 42 percent. The increase in inflation, or the Consumer Price Index (CPI), over this same period was 24 percent. Why did costs increase above inflation? A key explanation is that labor costs for faculty increased by 40 percent. The fact that RLAC's costs increased at a faster rate than the CPI because of its labor costs is consistent with the analysis in the previous section: Higher education has a higher wage premium because it employs so many people with advanced degrees, not just faculty but also staff such as information technologists and other professionals.

Another explanation is that while costs continued to increase, revenue sources beyond tuition are limited. The major sources of revenue for liberal arts colleges are student charges (net of financial aid) and endowment earnings. During this period (2000/01 to 2009/10), RLAC's endowment barely kept up with inflation, so increases in student revenues were required to pay for the increased costs. Yet as mentioned above, the sticker price remained below the cost per student in 2010, so every student still received a subsidy. However, student charges covered a higher share of total expenses and grew from 72 percent to 81 percent of expenses per student during this period. This result is consistent with the national data presented in figure 3 showing that the percentage of costs covered by net tuition increased from 2000 to 2010.

Does RLAC accurately represent the liberal arts college sector? As we have shown, the trends of the averaged data for these twelve liberal arts colleges support the national data overviewed in the previous section. Tuition increased above inflation and family incomes. Costs also increased above inflation, largely driven by increases in the costs of highly skilled labor. Subsidies for full-pay students remained but were reduced. Yet despite these similarities with the national trends, RLAC has significant financial advantages that much of the liberal arts sector does not enjoy.

Most important, RLAC was fortunate to have an endowment of more than $700 million. This amount falls into the Platinum category, the highest of three categories as described by Lucie Lapovsky in a paper that compares three liberal arts colleges with significantly different levels of endowment per student, labeling them Platinum, Gold, and Silver.[14] Even though the endowment did not grow at the rate of inflation over this period, it provided an important source of revenue to support increases in financial aid and other expenditures in addition to tuition.

A related advantage of RLAC is that it enjoys a strong national reputation and is experiencing the growth in demand documented by Hoxby (2009).[15] Because of demand, RLAC can set its own price. It can also provide need-based financial

aid for the educational purpose of socioeconomic diversity but does not need to significantly discount tuition to simply fill beds. Not only does RLAC have a greater endowment per student than the typical liberal arts college, but its net tuition per student is also greater, meaning there is significantly more to spend on instruction for each student. Despite these market advantages, RLAC must question if its financial model is sustainable. Because costs increased faster than inflation while family incomes did not even keep pace with inflation, and because it is highly unlikely that endowments will continue to increase at double-digit rates as they did before the downturn, the pressure to find ways to control costs is significant.

Responding to the Challenges

The data on American liberal arts colleges suggest that we are entering an era in which change is needed. Demand is up, in part because of increased economic returns to postsecondary schooling.[16] Costs are up, in part because of the increased cost of skilled labor and a variety of quality improvements. The actual price paid (net tuition) is up for many families relative to household income, as higher tuition has not been completely offset by higher financial aid in many cases, while household incomes have been stagnant or declining over the last decade.

Within liberal arts colleges, differing circumstances result in differing challenges. For well-endowed and selective colleges, large endowments per student, which have experienced significant volatility, create management issues as spending rules translate volatility in endowment returns to volatility in support for operating budgets. (Of course, schools with smaller endowments would be happy to have these problems in exchange for larger endowments.) However, the wealth of these institutions and demand from higher-income students, whose families have done relatively well over the last thirty years, have allowed those schools to charge higher tuition while protecting access for middle- and low-income students through financial aid. For liberal arts colleges with smaller endowments, slow growth and declining family incomes generally have put significant pressure on tuition revenues, as has discounting beyond need through merit-based financial aid, while they still face the pressures of increased costs for skilled labor.

Until now there have been limited incentives or pressures for liberal arts colleges to be more innovative about improving productivity and lowering costs. Many upper-income families have been willing to pay for additional programs and services that they perceive as valuable to their children, and schools have competed for those students by spending on services, thus pushing up costs. This

has been particularly true among the most selective private colleges and universities, where 70 percent of students come from the top 20 percent of income distribution. While these highly selective colleges have greater resources to invest in productivity-increasing innovations, they have faced fewer pressures to do so.

Controlling Costs in the Years Ahead

Liberal arts colleges, particularly those not among the wealthiest, will face challenges because they must balance innovations and services with controlling costs. One challenge, of course, is that these schools attract students from different socioeconomic groups. While those at the top end are willing to pay for a variety of programs and experiences, families who are less well-off may be less willing or unable to afford these expenditures. If colleges and universities continue to meet the demands of their higher-income students for these programs, this puts pressure on financial aid budgets as they continue to support diverse student bodies.

Improving graduation rates as a means of controlling costs is one obvious possibility that has been receiving increasing attention, given that graduation rates at our public institutions are, on average, below 50 percent.[17] Changes that improve graduation rates without either eroding quality or increasing costs significantly could potentially reduce the costs of a college degree by large amounts. Streamlining the curriculum could reduce barriers to completing degree requirements and improve both graduation rates and time to graduation, but this may be viewed by some as reducing the quality of the academic experience.

Many liberal arts colleges already have significantly higher graduation rates than do public institutions, in fact justifying some of the higher costs. But there are still possibilities to pursue. For example, schools could add summer sessions, as Wesleyan University has recently done. One often overlooked cost of higher education is earnings foregone while in school, and a three-year rather than a four-year program would significantly reduce this cost. This assumes that the three-year degree does not involve just eliminating one academic year's worth of credits but instead allows students to earn those credits during the summers. A three-year program would increase savings but could significantly affect the educational experience, perhaps reducing the quality and value of the degree. Adding summer sessions would also make greater use of facilities, reducing capital costs. It is important to note that this would not necessarily save on labor, since additional faculty would be needed to teach these classes during the summer.

Attracting and retaining talented faculty is critical to maintaining excellence. While many colleges are trying to reduce costs by hiring more part-time and ju-

nior faculty,[18] there is increasing evidence that this approach reduces the quality of the educational experience. An alternative is to focus faculty efforts on activities that are critical to effectiveness. For example, any non-core activities undertaken by faculty that could be done at less cost by others or by using technology would free up faculty time for more productive activities. An example would be technologies that check prerequisites at the time of registration, freeing faculty time for more important advising or instructional activities.

There may also be opportunities to reallocate faculty time to higher productivity activities within the time currently allocated to teaching. Early evidence suggests that hybrid courses, involving some online materials as well as time in class with a faculty member, may be able to reduce costs while maintaining or improving learning outcomes.[19] It is unlikely that these hybrid courses will work across the curriculum, but they could be useful in some areas. For example, a hybrid course may be a better alternative than a large lecture class in some cases. Schools that pride themselves on having small, intimate seminars may find technology solutions to cost challenges less appealing, although their attractiveness will also depend on the current level of financial pressure, with those facing the greatest pressures most likely to experiment with new alternatives.

Other ways to reduce costs are more questionable. Asking faculty to teach more could reduce costs but would affect quality in both the short and long run. This would be similar to asking faculty to take a pay cut, reducing their compensation relative to other career opportunities. Colleges might also consider cutting back on expenditures for social functions, technology add-ons, counseling, internships, under-enrolled classes or programs, organic foods, or athletics. The problem with this strategy is that many families are willing to pay for programs or services that they deem valuable. This is particularly true at colleges and universities competing for students whose families are willing and able to pay for (perceived) quality.

Another possibility is allowing colleges and universities to "collude" in lowering costs. This would acknowledge that controlling costs is a prisoners' dilemma: while everyone might want to do it, doing so unilaterally can put an individual institution at a competitive disadvantage. Collusion, with all of its negative connotations, could be welfare-improving if it allowed cooperation on cost control in service of affordability and mission.[20] While colleges and universities might be able to agree on some expenditures to avoid or minimize (such as merit aid, climbing walls, or saunas), cutting others would be more problematic. Individual

institutions would probably not be willing to commit to constraining their ability to make decisions about such things as average class size or teaching loads or number of languages taught.

One current risk is that the government will interfere more with policies if costs are not better managed. Price controls seem unlikely, but the government could start trying to tie support of one type or another to goals of access. President Obama made several policy proposals that move in this direction. Any such policy changes might involve unintended consequences: some incentives might actually align with established values, but not others.

It is important to understand that reducing financial aid does not reduce the cost of producing a year's worth of education. It simply changes the net price that students are asked to pay. In fact, cutting financial aid actually allows schools to spend more because it increases net tuition revenues, allowing increased expenditures. Constraining financial aid in many cases would be easier than controlling costs as a means of dealing with financial pressures, but such a shift risks alienating the public and reducing access for many students and families.

Virtually all of the highest-tuition colleges and universities in the United States offer significant need-based financial aid, so those students paying the full sticker price are most often from higher income families. Decisions at those schools to hold down tuition increases—the price students from higher-income families pay—and to compensate by reducing financial aid spending, would reduce access for talented students from low- and middle-income families. Holding down tuition while reducing financial aid is a transfer of financial assistance from one set of students (financial aid students) to another (full pay students). It does not reduce the costs of educating a student.

One consequence of declining availability of public financial support and increased tuition costs is that families will bear more of the cost of education. Because loans for many students are more than justified by the returns on higher education, it makes sense to facilitate more borrowing on the part of students and families, despite all the concerns about students graduating with excessive loan burdens. We should, however, encourage policy makers to increase income-contingent options for borrowers. Access to credit would help families with liquidity constraints that want to invest in higher education given the expected returns. Making loan repayment dependent on students' postcollege earnings would protect some people from excessive debt, since not everyone will make the expected return. Much work has been done devising income-contingent options,

which suffer from adverse selection problems. Loan forgiveness for individuals who go into low-paying professions, similar to loan forgiveness options for public service, may be an effective strategy.[21]

While the public and private non-profit colleges and universities are struggling with issues of cost and access, the for-profit sector has become an important component of American higher education. We should pay more attention to them, both because they may be able to make a positive contribution to increasing access to education in America and because they may challenge how we have traditionally operated. Higher education has traditionally been in the public and non-profit sectors because of concerns that the private market would not supply these services in an optimal way.[22] While these concerns have attracted increased government oversight, the for-profits are also innovating, particularly in the use of technology, which may hold lessons for liberal arts colleges. Interestingly, a variety of selective private non-profit colleges and universities are entering the space of the for-profits both by partnering with them and by offering competing products and services.[23] The for-profits are going to test the definition of academic quality and what students and families want and are willing to pay for.

Conclusions

The United States has been at the forefront of higher education for over a century, with more than four thousand institutions meeting the needs of students and their families. The liberal arts colleges have been particularly successful in preparing students to meet the complex challenges of our rapidly changing world. Yet in today's economic climate, colleges themselves must face the challenges of rising costs resulting from high wages for a skilled labor force and from programs and services that have increased both the quality and expense of higher education. Even institutions that rely on endowment earnings and gifts have suffered during the recent recession. The escalation of costs, the rise in tuition, and the possibility of declining financial aid have all significantly increased the anxiety surrounding access to college on the part of students, families, and policy makers as well as of colleges and universities themselves as they work to fulfill their missions.

While the cost of a liberal arts college education is likely to increase at rates higher than those for other goods and services, tuition can not continue to exceed the growth in family incomes as has been the case over the past decade. To sustain progress, the leaders of liberal arts colleges must think creatively, continue to look for ways to control costs, and watch for new opportunities that reflect changing

conditions. These realities hold important lessons for everyone who looks to the American system for leadership and fresh thinking about higher education and the superb advantages it offers to individuals and communities.

NOTES

1. Barack Obama, "Remarks by the President in State of the Union Address" (January 24, 2012), http://www.whitehouse.gov/the-press-office/2012/01/24/remarks-president-state-union-address.

2. President Obama's challenge to colleges and universities to slow tuition growth or risk losing taxpayer support is a good example. Public institutions have increased tuition precisely because of declining taxpayer support, as they attempt to protect quality. In other sectors, costs and tuition have gone up despite public support, as institutions compete for students by adding programs and services. It is this latter group to whom President Obama was issuing his challenge.

3. The liberal arts colleges included all participated in "The Future of the Liberal Arts College in America," the conference at Lafayette College on April 9–11, 2012, that sparked this book.

4. Seed Media Group, "Knowing Sooner," *Seed,* December 6, 2010.

5. "Trends in College Pricing," 2011 Report of the College Board, http://trends.collegeboard.org.

6. Examples include the creation of Yale-NUS, a liberal arts college in Singapore, and significant interest in liberal arts education in China, including the founding of Yuanpei College at Peking University.

7. William J. Hussar and Tabitha M. Bailey, *Projections of Education Statistics to 2020,* NCES, IES, U.S. Department of Education, September 21, 2011, http://nces.ed.gov/pubs2011/2011026.pdf.

8. Ron Haskins, Harry Holzer, and Robert Lerman, *Promoting Economic Mobility by Increasing Postsecondary Education,* May 2009, www.economicmobility.org.

9. Thomas Friedman, "New Rules," *New York Times,* Sept. 8, 2012, www.nytimes.com/2012/09/09/opinion/sunday/friedman-new-rules.html?emc=tnt&tntemai11=y.

10. Caroline M. Hoxby, "The Changing Selectivity of American Colleges," *Journal of Economic Perspectives* (American Economic Association) 23, no. 4 (2009): 95–118.

11. *The College Board, Annual Survey of Colleges.* NCES, Integrated Postsecondary Education Data System (IPEDS), 2012.

12. Jacob Goldstein, "Figuring Out the Real Price of College," Planet Money Blog, *NPR,* May 11, 2012, www.npr.org/blogs/money/2012/05/11/152499671/figuring-out-the-real-price-of-college.

13. Hoxby, "Changing Selectivity," 95–118; Gordon C. Winston, "Subsidies, Hierarchy and Peers: The Awkward Economics of Higher Education," *Journal of Economic Perspectives,* 13, no. 1 (1999): 13–36.

14. Lucie Lapovsky, "Tale of Three Campuses: A Comparison of Three Small Liberal Arts Colleges," Lapovsky Consulting, February 14, 2012, http://lapovsky.com.

15. Hoxby, "Changing Selectivity," 95–118.

16. Claudia Goldin and Lawrence Katz, *The Race between Education and Technology* (Cambridge, MA: Harvard University Press, 2008).

17. William G. Bowen, Matthew M. Chingos, and Michael S. McPherson, *Crossing the Fin-*

ish Line: Completing College at America's Public Universities (Princeton, NJ: Princeton University Press, 2009).

18. Ronald G. Ehrenberg and Ling Zhang, "Do Tenured and Tenure-Track Faculty Matter? *Journal of Human Resources* 40, no. 3 (Summer 2006): 647–65.

19. See William G. Bowen, Matthew M. Chingos, Kelly A. Lack, and Thomas I. Nygren, "Interactive Learning Online at Public Universities: Evidence from Randomized Trials," *Ithaka S + R,* Carnegie Mellon, May, 22 2012, www.sr.ithaka.org/research-publications/interactive-learning-online-public-universities-evidence-randomized-trials.

20. See Matthew Reed and Robert Shireman, "Time to Reexamine Institutional Cooperation of Financial Aid," *The Institute for College Access and Success,* June 2008, www.usc.edu/programs/cerpp/docs/Timetoreexamineinstitutionalcooperationonfinancialaid.pdf.

21. Bruce Chapman, "Income Contingent Loans for Higher Education: International Reforms," in *Handbook on the Economics of Education,* vol. 2, ed. Eric Hanushek and Finis Welch (Amsterdam: Elsevier, 2006).

22. Henry Hansmann, "The Role of Nonprofit Enterprise," *Yale Law Journal* 89 (April 1980): 835–98.

23. Nonprofit and public university involvement with Udacity, edX and Coursera are examples.