



COLLEGE of EDUCATION

CENTER FOR THE STUDY OF HIGHER EDUCATION

---

# Postmortem for the Current Era: Change in American Higher Education, 1980-2010

---

Roger L. Geiger  
Professor & Senior Scientist  
Center for the Study of Higher Education  
The Pennsylvania State University  
400 Rackley Building  
University Park, PA 16802  
(814) 865-6346  
E-mail: [rlg9@psu.edu](mailto:rlg9@psu.edu)

---

July 2010  
Working Paper No. 3

---

## POSTMORTEM FOR THE CURRENT ERA:

### CHANGE IN AMERICAN HIGHER EDUCATION, 1980 - 2010

This paper seeks to define and characterize the *current era* of higher education in the United States. By this label I do not mean just the present condition of American colleges and universities, but rather the historical era that commenced in the years around 1980. I argue that three historical trends crystallized in those years and accelerated in the past three decades. Undergraduate education has bifurcated into selective and non-selective sectors that have been growing increasingly distinct. In the non-selective sector, the large majority of students attend underfunded institutions that graduate fewer than half their students. In the selective sector, institutions have conformed to serve a relatively affluent clientele through restrictive pricing, comforting ideologies, and abundant resources. The third face of American higher education—graduate education and research in major universities—has prospered during the current era, with American research universities setting a model for “world-class universities” that inspires both envy and emulation. American higher education thus presents three different faces, which largely pertain to three different clienteles. These three faces define a good part of whom colleges and universities serve and what they provide entering the second decade of the 21<sup>st</sup> century.

Each of these faces has been shaped by powerful social trends of the current era. The weakness of the non-selective sector reflects a disinvestment in public education over this era, part of the neo-liberal and anti-tax movements that sought a reduced role for public services generally. The flourishing of the selective sector has paralleled the growing inequality of wealth in the United States since 1980.<sup>1</sup> Universities, finally, have gained growing recognition as central institutions for knowledge-based societies and have consequently drawn support for this role from multiple sources. Each of these developments represents a stark reversal of conditions that characterized American higher education through the 1970s.

#### I. The Dismal 1970s

The 1970s are generally depicted as a difficult decade for higher education (and much else) in the United States, a hangover of sorts after the exuberant growth and anarchic turmoil of the 1960s. I called a chapter on this decade, “surviving the seventies,” reflecting what appeared to be a dearth of resources in the stagflation economy and public disenchantment with universities.<sup>2</sup> In a longer perspective, however, These conditions should be seen as the exhaustion phase of three of the strongest secular movements of the mid-twentieth century—the end of demographic expansion in enrollments, the culmination of a growing ‘publicness’ of higher education as a whole, and consolidation of vastly expanded federal responsibilities for academic research.

Enrollments in U.S. colleges and universities doubled from 1951 to 1961 to about 4 million. Then, as the baby-boom cohorts graduated from secondary school and participation rates rose, an additional half-million students enrolled each year until the early 1970s. Total enrollments topped 11 million in 1975, but then, for the first time in U.S. history, higher education virtually ceased to grow. Total enrollments crept upward after a few years, but a large proportion of students for the next two

decades matriculated at 2-year community colleges, where most attended part time and where completion rates were poor. Entering full-time freshmen did not surpass the 1975 level until 1998.<sup>3</sup>

Both culture and career considerations influenced these developments. A pervasive alienation from academic culture characterized the aftermath of the student revolt and evolved into a generalized disillusionment with colleges. Such feelings were expressed in a huge defection from academic subjects—the humanities, social sciences, and education—toward vocational majors, particularly business.<sup>4</sup> The preference for community colleges also reflected a discounting of academic values. These attitudes were reinforced by a poor job market that depressed the wage premium received by college graduates and led to exaggerated charges of “overeducated Americans.” Pundits extrapolated that far worse conditions lay ahead. Chiefly, these factors affected males, whose graduation rates fell by 17 percent in the seventies, although the gains that women had been making leveled off for about five years as well. In 1980, women became the majority of students in higher education—a salient feature of the current era.<sup>5</sup>

The English language has no word for the opposite of *privatization*. Yet, that is what occurred from 1945 to 1980 in American higher education (as well as other spheres). American states poured enormous resources into building public systems of higher education: flagship universities were expanded and outfitted for an extensive research role; teachers colleges grew into regional universities; public urban universities multiplied and grew; and a vast array of community colleges was built. These institutions absorbed the bulk of the additional students, so that the public share of total enrollments, which was one-half in 1950, reached 79 percent in 1975. The seventies are perceived to be a time of financial hardship—“retrenchment” was the watchword—but real public funding actually increased until the last years of the decade, reaching its highest level for per-student outlays in 1977 (Figures 2 & 3). Real tuition at public institutions declined modestly (i.e. increased less rapidly than inflation). Moreover, the Education Amendments of 1972 provided a huge new infusion of public funds for higher education.

The opposite side of this growing ‘publicness’ was the perilous condition of the private sector. With widespread concern that many private colleges would be forced to close, federal student financial aid legislation in 1972 was consciously designed to help keep the private sector viable. Even institutions with large endowments saw the value of those funds shrink along with alumni gifts. Private colleges and universities experimented with ways to become more affordable, more vocational, and/or more accessible to a broader clientele. Private tuitions were stable for the decade relative to family incomes as institutions feared to raise prices in the face of falling demand (Figure 5).

The last years of the seventies thus represented the high-water mark for public investment in higher education. They also constituted the apogee of access for U.S. students to low-cost, well-furnished, publicly supported postsecondary education. Interestingly, low costs and wide availability did not sustain enrollment growth, as just indicated. Public funding for access was not accompanied by public confidence in higher education.<sup>6</sup> In fact, the extent of public social expenditures began to be challenged. Internationally such sentiments were addressed as the ‘crisis of the welfare state.’ Still, no one in these years foresaw a resurgence of private higher education.

Burgeoning federal support for university research created a 'golden age' for a decade after the launch of Sputnik in 1957, but funding for research then stagnated and assistance for universities was drastically curtailed (Figure 4). Expenditures for academic research were flat from 1968 to 1975, and rose only modestly until the mid-1980s. More significantly, an air of pessimism hung over the academic research enterprise. Federal agencies, taking their cue from politicians, sought practical results from research investments with programs like the NSF "Research Applied to National Needs" and the NIH "War on Cancer." Universities, after being hammered for performing defense research, generally harbored an ivory-tower mentality, preferring the kind of pure academic research that had received such bounteous support after Sputnik.<sup>7</sup> They were thus doubly frustrated by the contraction and redirection of federal research funding. Ties with industry were sparse, with some notable exceptions. Overall, industry supported just over 3 percent of academic research.

In sum, the forces that had long sustained three vast historical movements were by the end of the 1970s exhausted. Moreover, the premises on which they had mobilized people and public spending were now being challenged. An additional factor—a wild card of sorts—was the inflation that raged during those years, increasing the cost of living by 50 percent from 1978 to 1982. Rapidly rising prices drove home the sense of crisis and encouraged willingness to try new initiatives. The election of Ronald Reagan to the presidency in 1980 certainly reflected a change in the zeitgeist that ultimately conditioned changes in higher education. However, a series of largely unrelated events set the course for the current era.

## **II. The Current Era, 1980-2010**

*Privatization—the Financial Revolution.* Early in 1978 Harvard University made a policy decision to boost its tuition price substantially and, in compensation, to increase student financial aid with internal funds. Already the most expensive college, it boosted tuition by 18 percent, from \$4,450 to \$5,265. Experiencing no drop in student demand, Harvard continued to raise tuition aggressively, by an annual average of \$840 for the next ten years. Before these hikes, Harvard tuition was 4 percent above comparison institutions; by 1984 it was 12 percent higher. But not for long. Yale and Princeton immediately followed Harvard's example, and this pattern soon spread throughout the private sector. Private colleges gradually realized that high tuition was a signal to upper-middle-class students and parents of membership in the elite, selective sector.<sup>8</sup>

This development was facilitated by another event, also in 1978. The system of federal financial aid established by the Education Amendments of 1972 rested firmly on the principle of providing taxpayer support strictly on the basis of financial need. Thus, grants, loans, and even college work-study all had family income caps. However, a popular reaction soon emerged, invoking the pretext of rising costs (although inflation was the real culprit: see Figure 5). The "middle-class squeeze" became the rallying cry for families that were supposedly being priced out of higher education. Congress responded by passing the Middle Income Student Assistance Act. This act raised income limits for student grants (now, Pell Grants), which had little impact, and removed all income limitations for Guaranteed Student Loans, which had major consequences. The volume of loans quickly mushroomed, more than doubling to \$9 billion from 1977 to 1980 and becoming the largest component of federal student aid. Income

caps were re-imposed in 1981, but the volume of GSLs did not decline—in fact it rose slowly until 1992, when terms were again liberalized, touching off another upward ratchet. Higher education had tapped into a new source of revenue—the future earnings of its students—and it would only encourage the ‘loan culture’ that this spawned. Congress obliged with new kinds of loans without subsidies or income caps.<sup>9</sup> (See Figure 6)

The combination of institutional financial aid from private institutions and easily available student loans created system of finance for the private sector: *high-tuition/high-aid*. By using the standardized “expected family contribution,” plus any eligible grants and student loans, college financial aid offices could determine the maximum amount a student could afford to pay. Institutional financial aid, or tuition discounts, then could cover the difference between financial capacity and the official sticker price. Soon, only fairly wealthy students paid the sticker price at most private colleges, while others paid variable prices determined by the financial aid office. Colleges thus extracted the maximum revenue from each aided student, while avoiding price resistance in the form of reduced demand. They were thus free to raise tuition for those who could afford it while providing an appropriate tuition discount for those who could not.

Public colleges and universities cannot engage in tuition discounting—technically, price discrimination—to any significant extent: they have too many middle-class students and too few wealthy ones. But they compensated for stagnant state appropriations (Figure 2) by also raising tuition. They too benefited from the loan culture. In fact, significant privatization occurred. In 1980, student tuition provided roughly 20 percent of operating funds, but in 2006 that figure was 43 percent. Thus, over one fifth of operating costs at four-year public universities were transferred to students, their parents, and their loans.<sup>10</sup>

Privatization brought a striking reversal of fortunes: in the current era private colleges and universities have fared much better than public ones, with the wealthiest institutions far outpacing the rest. For public universities, in particular, competing with their private counterparts has been one factor driving rising costs.

Student loans have been an indispensable component of privatization. For 2007, federal and private loans totaled \$86 billion, \$60 billion to undergraduates. This total exceeds all public appropriations to higher education (\$74 billion), and nearly equals the total national tuition bill (net) of \$92 billion. The 2008 Survey of student aid reported that 70 percent of students at 4-year public were receiving financial aid (average \$8,000-10,000), two-thirds as loans; more than 80 percent of private students received financial aid (\$16,000-19,000), roughly split between loans and tuition discounts.<sup>11</sup> Most important, the post-1980 financial regime has allowed institutions in both sectors to dramatically raise the relative price of higher education. Figure 5 shows tuition prices in both the public and private sectors rising dramatically and consistently after 1980. This rise contrasts starkly with the remarkable stability of relative pricing from 1960 to 1980. How have American universities been able to more than triple their sticker prices? The process was greatly abetted by a growing demand for places at prestigious colleges characterized by high prices, high expenditures, and selective admissions.

*Revival of Elitism—the Selectivity Sweepstakes.* The 1980s witnessed an intensification of the competition among students for places at prestigious, selective colleges and—reciprocally—competition among these colleges for the best students—the *selectivity sweepstakes*.<sup>12</sup> These processes were scarcely new, but they had been overshadowed in the seventies by the prevailing anti-elitism and alienation. A number of factors undoubtedly favored this transformation of the zeitgeist:

- Revival of the job market and college wage premiums, particularly opportunities for highly paid careers
- Generational rebellion against the dour, anti-business rhetoric of the seventies
- Intense marketing efforts by colleges to boost applications and enrollments
- The beauty contest, or league tables first established by the *U.S. News & World Report* rankings in 1983.

However, such factors ignited and amplified fundamental market forces that had long been at work.

The prime mover in unleashing these market forces was the integration of a national market for higher education over the last 50 years.<sup>13</sup> The enlargement of the market for selective institutions by itself tended to produce increased segregation of students by ability level. Top students, given greater choice, tended to prefer institutions promising academic quality in terms of faculty, facilities, and fellow students. Peer effects resulting from the latter, in fact, are particularly important due to the role good students play in educating one another. Colleges and universities clearly recognize the value of such students and do all they can to attract them. Since the most effective inducement over the long run is academic quality, they chiefly resort to qualitative competition.<sup>14</sup> Increased spending for the enhancement of quality serves not only its immediate purpose, but by attracting more top students it has an additional peer effect—a multiplier—which boosts quality further still.

Qualitative competition spurred private colleges and universities to augment educational spending through the policy of high tuition and high aid. The most prestigious institutions—those with high demand—have been best able to make this approach work to their advantage. In this respect, prestige helps to optimize tuition revenues. Prestige also appears to be a critical factor in attracting voluntary support. Prestige for these purposes comes in different forms. However, academic distinction, particularly in undergraduate education, seems to be the most potent factor in unlocking the generosity of alumni donors. High costs among private universities correlate closely with the prevalence of high-ability students. High levels of spending, in other words, promote higher student quality. This pressure for ever-more spending among the country's wealthiest universities is now conventionally called the "arms race."<sup>15</sup> But for all institutions that can run in this race there are benefits to belonging with the 'selective sector'—of competing in the selectivity sweepstakes.

A catalyst for creating these sweepstakes was the appearance in 1983 of the first ranking of colleges by *U.S. News & World Report*. The initial rankings were based solely on reputation, and thus mirrored wealth, selectivity, and visibility. Still, they proved enormously popular, and from 1987 they appeared annually with a more complex methodology and more numerous categories. For the leading

private institutions, they soon carried significant consequences for the number of applications, the yield of matriculating students, and amounts of financial aid needed to recruit a class.<sup>16</sup>

There is no strict definition of the selective sector. It is widely noted that perhaps 50 institutions actually reject more students than they accept, and possibly only five that still practice 'need-blind' admission. In fact, many 'selective' institutions reject fairly few applicants. Rather, the distinguishing feature of the selective sector is qualitative competition: in the words of economist Gordon Winston, "competition in the input market for scarce students (and faculty) quality that will improve a school's educational quality and position."<sup>17</sup>

In practical terms, the top of the selective sector is quite obvious, while its nether border is indistinct and indistinguishable. Private research universities almost all belong. So do the top fifty liberal arts colleges, and a good number of less selective institutions that wish to be associated with them. Large public research universities belong in part; that is, they compete in the same input markets for students and faculty, even though they are much less exclusive in whom they admit.<sup>18</sup> In addition, a handful of smaller public universities have attained recognition for selectivity and undergraduate quality. All told, perhaps 15 percent of first-year students at four-year institutions, drawn predominately from the top quartile of that cohort, matriculate in the selective sector. What is certain, student demand for these places has grown significantly during the current era. Reciprocally, the number of institutions engaged in qualitative competition has also grown appreciably, and, more tellingly, qualitative competition has grown far more intense. The effect has been a general migration of the most able students into the selective sector. This can be documented with rising SAT scores (against a stable distribution) and growing concentrations of the highest scoring students (700+ scores). Hence, one of the salient characteristics of the current era has been the growing differentiation of the selective sector from the rest of American higher education.<sup>19</sup>

Economists have attempted to determine if attending a selective institutions enhances career prospects, and why. Findings are unequivocally positive on the first issue. For example, attending a tier one college (top 44 institutions) has a substantial positive effect on earnings, and attending a tier two institution (next 85) has a smaller positive effect. Moreover, these differentials have been increasing in the current era. As for explanations, the evidence seems to indicate that selective colleges are effective at identifying students with personal attributes conducive to successful careers, other things being equal, and that their college experience (treatment) has positive effects as well.<sup>20</sup>

*Careers and Vocations.* In the early 1970s somewhat more than 40 percent of beginning students indicated that "being very well off financially" was an essential or very important objective. By the 1980s that figure had risen above 70 percent and more recently to 77 percent—the highest score for freshmen "objectives". American higher education has always balanced a combination of cultural and vocational goals, but the current era has obeyed student preferences for training for jobs. Education scholars Norton Grubb and Marvin Lazerson regard our greatest educational success as "the creation of a mass system of higher education inextricably linked to occupational purposes. Students come to get ahead, to become credentialed and licensed to the labor market."<sup>21</sup> The 2006 Report of the Spellings Commission challenged colleges and universities to go further down this path: "to address the fundamental issues of

how academic programs and institutions must be transformed to serve the changing educational needs of a knowledge economy.”<sup>22</sup> However, there is a difference in how students are ‘credentialed and licensed’ for their economic roles in the selective and non-selective sectors.

The decline of liberal arts and their displacement by vocational subjects occurred at the outset of the current era among non-selective institutions. The regional comprehensive colleges of state systems were most affected, as were the bulk of the nonselective private colleges. Business was an initial winner as students voted with their feet for occupation-oriented studies, and business BA’s rose to 25 percent of graduates in the mid-1980s. However, business became so popular that enrollment limits were imposed at many schools, and its share of graduates has stabilized around 22 percent. Institutions in these sectors have been open to new fields that sought the dignity of college degrees. This was the case with some health professions (e.g. physical therapy), security services, and leisure studies, for example. In a sociological analysis of this phenomenon, Steven Brint and associates found “a particularly strong occupational emphasis in institutions enrolling a high proportion of students with low test scores and, by implication, from lower socioeconomic backgrounds.” By further implication, the authors perceive these institutions to have become “mass terminal institutions.”<sup>23</sup> The proportion of students at public, four-year, non-university institutions—a good proxy for this sector—has been about 25 percent throughout the current era. The sector of American higher education to expand its share of enrollments most significantly has been for-profit colleges, which are purely vocational. Less than 2 percent of enrollments in 1995, they exceeded 6 percent in 2007. The economic collapse of 2008 has also produced a sudden spurt in community college enrollments—an estimated 17 percent from 2007-2009, with full-time students jumping by 24 percent. In addition, master’s degrees, which are almost entirely professional in nature, have expanded in the last two decades—from one for 3.25 bachelor’s degrees in 1990, and one for 2.5 bachelor’s in 2006.<sup>24</sup>

The number of liberal arts majors cratered from the seventies to the eighties. However, since then these subjects have staged a respectable recovery, but today the liberal arts and sciences thrive almost exclusively in selective institutions. These students appear to be no less career-minded than their counterparts at non-selective schools; they merely take a longer view. A large portion of students in the selective sector plans to continue their studies in graduate and professional schools.

*Intensification of Academic Research.* The current era for university research was symbolically launched in 1980 with two unrelated events. First, Congress passed the Bayh-Dole Act, which allowed universities to take ownership of inventions emerging from federally supported research. Then, the spectacular Wall Street debut of Genentech signaled the commercialization of biotechnology and touched off the biotech boom.<sup>25</sup>

The Bayh-Dole Act (University and Small Business Patent Procedures Act) was an important adjustment of patenting law that created a uniform policy toward inventions resulting from federally financed research. Enacted at the height of concerns over lagging U.S. economic competitiveness, it was explicitly intended to mobilize the fruits of university research for economic development and to make these fruits more accessible to small businesses. The Act required, among other things, that universities file U.S. patent applications on discoveries made with federally funded research and actively seek to commercialize them. Universities also had to share resulting income with inventors and devote the balance to research and educational purposes.<sup>26</sup> Before Bayh-Dole, 25 universities had internal intellectual property offices for patenting and licensing; fifteen years later, every major university had



one. Bayh-Dole itself was merely the most prominent of a series of enactments by federal and state governments intended to mobilize academic research to develop and transfer technology to industry. This effort, however, derived credibility and urgency from the revolution in biotechnology.

The discovery of recombinant DNA in 1973 created the possibility of engineering living organisms, but the success of Genentech confirmed a new paradigm for university-industry research relationships.<sup>27</sup> The breakthroughs in biotechnology emerged from the most basic kind of research; yet it pointed the way toward inventions of obvious usefulness. This relationship became increasingly common for “science-based technologies”—areas of pure science with clear commercial potential. In order to contribute to the economy, biotech inventions had to be protected by patents and then licensed to for-profit firms. This was not true for all university-spawned technologies, but biotech set the pattern for the patenting all university discoveries. New firms like Genentech, whether launched by faculty inventors or entrepreneurs (Genentech had both), proved the most appropriate vehicles for developing many science-based technologies. Hence, the rush of universities to establish Technology Transfer Offices. American universities were issued 250 patents in 1980 and 3,600 in 2003.

Patenting and licensing were the most visible outward manifestations of a reorientation of university research. A far larger movement supported research in collaboration with industry or in areas deemed ripe with future economic potential. The National Science Foundation led the effort to force-feed the development of emerging science-based technologies, as with the \$1 billion National Nanotechnology Initiative (2000- ). State governments also joined this effort, seeking to stimulate academic research that would contribute to local economies. After a flurry of initiatives in the 1980s, a reaction of sorts occurred in the 1990s. However, by the end of that decade states were again promoting technology-based economic development with increasing enthusiasm. Industry has been generally receptive to these initiatives (although critical of the intellectual property claims of universities). The portion of university research funded by industry roughly doubled in the 1980s, from 3 to 6 percent, but has not risen beyond that level. However, the great rapprochement of universities and industry has been a marriage encouraged and sometimes arranged by government policies.

The growing economic relevance of academic research has been a boon to the country’s research universities. American society has provided relatively abundant resources in the expectations of furthering innovation and, ultimately, the competitiveness of American industry. Not that these resources have been targeted only on research with commercial potential. Rather, the federal science agencies, leading universities, and large corporate funders have generally realized the necessity of maintaining a healthy, balanced academic research system focused primarily on basic science. The result has been one of the most remarkable features of the current era: from 1968 to 1982 academic research grew from roughly \$8 to \$12 billion constant dollars (Figure 4). Since then it has risen on average by more than \$1 billion each year. University research has gained 1/8 percent (0.00125) of GDP in the current era—a 50 percent increase.

Although there has been a secular trend toward the extension of research to greater numbers of universities, the bulk of these research funds still flow to the laboratories of the same universities. Over the current era, this has produced a pronounced intensification of research. For the 99 research

universities that I monitored, enrollments grew by 15 percent from 1980 to 2000, but real research expenditures grew by 128 percent.<sup>28</sup> Increasingly, research has become an autonomous mission, only loosely linked (if at all) with undergraduate education. These universities have become critical centers of the knowledge economy, advancing the frontiers of knowledge while providing multiple services as repositories and disseminators. They have set the standard for what are now dubbed world-class research universities.

### III. Consequences

The four vectors of the current era—the financial aid revolution, selectivity sweepstakes, vocationalism, and research intensification—all bear an underlying signature by invoking private, as opposed to public or social, interests. They do not necessarily contradict public interests. On the contrary, to significant degrees, financial aid has allowed students with limited means to pursue postsecondary education; the selectivity sweepstakes has sorted students by academic ability so that the most able benefit from the most ample educational resources; vocationalism has prepared students for productive employment; and academic research has helped to revive and sustain the competitiveness of U.S. industry. Rather, these worthy social purposes have operated through incentives to private advantage. Thus, although public policies are involved to a greater or lesser extent, these vectors have derived their force from the market preferences of individual actors. But market relations can bring unplanned and sometimes unwelcome consequences.<sup>29</sup>

For undergraduate education, still the main activity of American higher education, the vectors of the current era have produced a growing bifurcation. U.S. higher education has always formed an institutional hierarchy, but this now looks more like a bi-modal distribution. On one side are relatively unselective institutions. They are heavily vocational, have lower costs and fewer educational resources. Their students chiefly come from middle and lower-middle class backgrounds, struggle financially with loans and jobs, and often attend part-time or irregularly. And their likelihood of obtaining a bachelor's degree in six years is less than 50 percent.<sup>30</sup> On the other side is the selective sector where institutions compete with one another to offer high-cost/high-quality education to the most talented students they can attract. These students come predominantly from affluent or at least upper-middle class families and receive strong academic preparation. Many still require financial aid to meet the staggering prices of private universities and colleges. Most of these students will graduate, often in four years, and the majority will acquire a graduate or professional degree as well.

Thomas Mortenson, who publishes *Postsecondary Education OPPORTUNITY*, has summarized this situation:

The gap in higher educational opportunity between those born into low-income families and those born into affluent families ... has been widening almost steadily since the advent of regressive social policy in the United States around 1980.<sup>31</sup>

For dependent students, his data show 54 percent of college graduates coming from the highest quartile of family income (2008).

The modal or average 18 year-old in the U.S. will graduate from high school and enroll in postsecondary institutions, but will have only an even chance of attaining a bachelor's degree. The low output of U.S. higher education—specifically the non-selective sector—is widely perceived to be a problem. Three factors have some bearing on non-completion.<sup>32</sup>

First, lack of adequate academic preparation. This problem is long-standing, but there has been no appreciable progress to date. For reading performance, probably the most critical academic skill, 39 percent of tested 17 year-olds in 2008 were able to “understand complicated information”—the kind of material encountered in college. This was the same level as 1971. These data suggest that one-half of students entering postsecondary education probably lack the reading skills needed for college study. Overall, 28 percent actually enroll in remedial courses.<sup>33</sup> International standardized achievement tests also expose the weaknesses of U.S. primary and secondary education. U.S. students' relative performance declines as they progress to the highest grades.<sup>34</sup>

Second, the rising costs of higher education. Given the complexity of student financial aid, rising prices appear to affect students from different income strata differently. Lower-income families rely heavily on grants and are reluctant to assume debt. Students from the middle two quartiles rely most heavily on loans. And, wealthier students appear more responsive to career prospects (rising wage premiums) than rising prices. Multiple studies suggest that rising prices discourage college-going among lower-income students, and also induce behaviors, such as part-time work, that are prejudicial to academic success among far larger numbers of non-affluent students. Thus, relatively high prices would seem to have a cumulative effect that discourages persistence more than decisions to enter college. Initial enrollment might be motivated by the substantial wage premium, but high costs and loan debt, especially coupled with mediocre performance, probably exacerbate attrition.<sup>35</sup>

Third, the disinvestment by states in non-selective institutions. This is the flip side of privatization—the scaling down of state appropriations for public non-selective institutions. The lower level of resources at these institutions translates into part-time, adjunct instructors, large or unavailable classes, and fewer amenities. Such cutbacks in the ‘supply’ of higher education resources have been found to depress educational attainment.<sup>36</sup>

Ironically, the low rate of completion in the non-selective sector has an indirect benefit for graduates of the selective sector. Harvard economists Claudia Goldin and Lawrence Katz have concluded that, “the slowdown in the growth of educational attainment since 1980 is the most important factor in the rising college wage premium of the post-1980 period.”<sup>37</sup> When considered against the social divide between the two sectors, this situation seems particularly perverse: the non-graduation of less affluent students has bolstered the earnings of more affluent students who do graduate.

In the non-selective sector the challenge is to account for weakness, but in the selective sector it is strength that must be explained. What social forces lie behind the extraordinary popularity of selective colleges and universities? How have they been able to raise prices so dramatically without diminishing student demand?

Economic explanations can answer the second question (how?), but not the first (why?). The increased stratification of higher education has paralleled the growing income inequality in the U.S., which has been driven chiefly by income gains at the top of the distribution. Even so, I calculated that in 2000 only the top 6 percent of relevant households could afford the costs of a selective private college or university. At current (2007) tuition levels, a family income of \$170,000 was needed to afford the expected family contribution.<sup>38</sup> The selective sector, even given its social skew, draws from a wider population, and the majority of these students require financial aid. Here the high-tuition/high-aid financial model has worked for both suppliers and consumers. Differential pricing, or tuition discounting, permitted institutions to extract maximal payments from aided students; but it has also offered each student an acceptable price for an elite education. Thus, net costs have risen substantially—and have been willingly paid. However, the burgeoning demand for places in the selective sector has also been a cultural phenomenon.

Higher education may be an investment in building intellectual capital, but it is also a discretionary consumption good, particularly in the selective sector. Parents take pride in the institutions their children attend. These institutions assiduously cultivate their brand names. Students choose the brands they wish to wear, and they wear them for life through identification with the institution and enduring ties with classmates. Parents and students have expectations for college that are strongly conditioned by social class, effectively joining culture and economics.

The selective colleges and universities are pervasively upper-middle class environments. In *Knowledge and Money* I outlined how self-selection of students produces a mixture of very wealthy students, students from highly educated households possessing considerable cultural capital, and high academic achievers from diverse backgrounds. Upper-middle class material culture predominates in these settings in such things as electronics, vacations, culinary tastes, and especially brand-name clothing and accessories. More significant is the creation of a “generalized *cultural* effect [resulting] from a richer casual environment in which students ... acquire from one another general knowledge and cultural sophistication.” Cultivating such an environment has not been left to chance. “Admissions, amenities, activities, and academics ... are the chief arenas in which the competition for the hearts, minds, and tuitions of students takes place.”<sup>39</sup>

The discussion of admissions has thus far focused on meritocratic selection on the basis of academic ability. However, among the most selective institutions all serious applicants have sterling academic records. Selection therefore is based largely on other characteristics. These schools welcome students with extraordinary talents, but above all they seek out personal and cultural attributes associated with subsequent success. Ironically, the more selective a college is, the more admissions decisions are made on non-academic criteria.<sup>40</sup>

A distressing portion of the ‘arms race’ of qualitative competition is focused on providing amenities for their upper-middle class clientele. Food and shelter—the necessities of life—have become chips in the bidding war for prized students. In addition to luxurious dormitories and sumptuous menus, impressive student centers and athletic facilities are now indispensable for elite campuses. Still, these are educational institutions. It is less obvious how the curriculum is shaped by the tacit cultural mission.

Selective colleges and universities all teach the basic academic disciplines. Most private schools are strongly focused on the arts and sciences, and interdisciplinarity is lauded almost everywhere—in fact invoked as pretext for more culturally weighted offerings. General education subjects outside the basic disciplines are likely to carry the most cultural baggage. These are also the subjects that schools highlight in their mission statements and web pages to project a distinctive image. However, distinctiveness is more a matter of style than substance, since all offer variations on similar themes.

Four dominant themes are emphasized in the rhetoric and tacit values of selective colleges and universities. They represent somewhat reinforcing ideologies that might be called a modern quadrivium:

- Multiculturalism or diversity has fervent support on selective campuses. Essentially, these values demand the proper appreciation of race, class and especially gender identities; and they now dominate the humanities, culture studies, and some areas of social science.
- Internationalization, which also emphasizes *difference*, encompasses the impulse to study, visit, and otherwise engage with other parts of the world in order to form ‘global citizens.’
- Environmentalism, long endemic on campuses, has acquired renewed urgency now given the fixation on global warming.
- And, civic engagement has acquired growing salience as an intended outcome of liberal education.

These four ideologies convey much of the socio-cultural content of an undergraduate education at a selective college or university. However, one must bore more deeply to appreciate how these ostensibly admirable goals are “socially situated,” as Pierre Bourdieu might have put it; how they provide the cultural capital of what David Brooks has characterized as the educated upper class.<sup>41</sup>

The culture of the upper-middle class in the current era has increasingly been differentiated from previous forms of elite culture—both the high culture of the arts and the wealth culture of ostentatious consumption. The new class has accepted and is comfortable with much of the cultural revolution of the 1960s and 1970s. Hence, multiculturalism is an ideology that class aspirants readily embrace. On campus, of course, it is offered in radical or moderate flavors. However, to resist multiculturalism would be *déclassé*—a violation of class. Racism, sexism, or homophobia are now considered to be failings of the lower class—think of Archie Bunker—or of older, benighted elites. Immunity from criticism gives multiculturalists a free pass to express and sometimes implement exaggerated views, sometimes with counterproductive results.<sup>42</sup> But the basic premises of the diversity ideology are assimilated by aspirants to the educated upper class.

The internationalism espoused by American colleges may appear a bit pretentious, but certainly the goal of making American students less insular is a worthy one. The weakness here is the disjunction between the objective of creating ‘global citizens’ and the means available. American students do well if they acquire any proficiency in a non-English language, or if they manage to take some U.S. courses in a foreign locale (study abroad). In fact, there are heavy overtones of class in this endeavor. Upper-middle

class students have the means to travel and study abroad, and these experiences convey cultural prestige.

Environmentalism has always been an upper-middle class value, since it invariably demands high social spending for ill-defined, supposedly virtuous purposes—and now more than ever given the concern over global warming. Upper-middle class students face few of these costs—today. Unfortunately, undergraduate general education courses teach little of the science behind global warming and possible responses. Rather, these courses often seek to convey ‘green’ values and inspire moral commitment, which tend to encourage symbolic rather than realistic long-term strategies.<sup>43</sup>

Finally, civic engagement connotes an upper-class appeal to leadership—to involvement and influence over government and public decisions. It seems to have displaced a fad for ‘service learning,’ which typically involved more plebian activities. In practice, the forms of civic engagement that are encouraged are directed toward the other values in the new quadrivium.

My skepticism toward these endeavors stems not from the root purposes, which I share, but rather from the intellectual superficiality of their current content. As promoted in selective colleges and universities, the new quadrivium is designed to appeal to the fashionable beliefs of earnest, privileged 18 year-olds. As such, it suits the clientele quite well for purposes of cultural reproduction: it perpetuates and reinforces an upper-middle class mindset while posturing as promoting democratic values.

The selective sector has thrived in the current era by burnishing its democratic image—meritocratic selection and minority recruitment, assisted by financial aid, to attract diverse and talented students and mold them into critical-thinking, civically engaged, environmentally responsible, multicultural, global citizens. Given bright students, carefully selected faculty, and wonderful facilities, these schools assuredly provide the opportunity for an effective education. However, this project is based upon three forms of hypocrisy that may someday undermine the entire edifice: 1) despite the democratic postures, their essential function is cultural reproduction of an educated upper class, and this is precisely what its principal clientele demands and purchases at premium prices; 2) despite claims of teaching critical thinking and providing a liberal education, the stereotypes embodied in the new quadrivium promote superficial reasoning within rather narrow channels; and 3) despite generous financial aid for a handful of poor students, the economic model of high-tuition/high-aid requires the enrollment of a preponderant number of wealthy students and squeezes every penny of consumer surplus from the merely well-off.

#### **IV. End of the Current Era?**

The current era was born amidst the financial turmoil of 1979-1982. At the time, it was impossible to perceive the long-term consequences of actions taken. Amid the noise of contemporary events, truly significant developments only become apparent in retrospect. Change occurred as institutions and individuals adapted to new conditions and learned from their experiences. The great recession that began in 2008 has brought even greater economic turmoil, but the direction of

subsequent trends clearly lies in the future. At this juncture, it is only possible to note the apparent dislocations and how they might affect the trends that have characterized the current era.

The immediate financial effects of the great recession on higher education were evident by 2010. Wealthy private colleges and universities suffered losses to their endowments and to their confidence. For a change, the greatest damage was suffered by the largest, professionally run endowments. Still, the worst fiscal disasters struck state treasuries, and (unlike endowments) these dire conditions promised to worsen before any signs of improvement appeared. Student demand ratcheted downward, as students at the margin migrated to less expensive sectors of the market. In addition, many young people who could not find jobs found college an attractive refuge. Thus, demand has grown appreciably among institutions with lower prices and lower expenditures. Of necessity, tuition has been increased in all sectors, with some huge percentage hikes at public universities. However, the 32 percent increase at the University of California, or \$2,500, is less money than two years of 'normal' 4 percent increases at private research universities. Spiraling tuition everywhere has elicited greater student aid, mostly in the form of loans. Thus, it would appear that the principal vectors of the current era have persisted, if not accelerated; but this frenetic advance may well force future adaptations.

No evidence suggests that the bifurcation of U.S. higher education into selective and non-selective sectors will attenuate anytime soon. More likely, realignments may take place among institutions or sub-sectors within these spheres. The non-selective sector appears to be lurching further toward vocational offerings. The continuing disinvestment in state master's institutions will make it more difficult for them to sustain liberal arts departments, and job-market anxieties are likely to lure students toward professional majors, as they did in the 1970s. However, these institutions may find themselves defending a constricting market niche—more expensive than community colleges and less vocational than the for-profits.

The decade of the 2010s should present expanding opportunities for community colleges. Already the favorites of the Obama Administration, states are counting on them to educate more students more cheaply. Their rapidly rising enrollments will bring stronger students to academic programs and greater possibilities for vocational ones, including new three- or four-year programs. The challenge for community colleges will be to improve their poor record for transfer to baccalaureate degree programs and to develop robust-sub-baccalaureate credentials. Resources and execution could be limiting factors in accomplishing these tasks, but successful or not, the community college sector seems destined to accommodate a larger share of postsecondary enrollments.

The most dramatic development in the open sector has been the rise of corporate for-profit institutions. Just 2.6 percent of enrollments in 1997, they comprised 6.4 percent in 2007 and have continued to gain market share. For undergraduates, this sector depends entirely on federal student aid. Tuition is high at these institutions, generally more than public universities; but they attract students through marketing and salesmanship, convenience, occupational targeting, as well as financial aid. As tuition rises in the public sector, and as more student financial aid becomes available, the for-profits become more competitive and more profitable. Moreover, as the for-profit sector expands it increasingly encroaches on the enrollment base of chiefly public institutions. For-profits focus on the

most lucrative areas, such as MBA's, and thus pose a growing threat to public sector revenues. The goal of corporate college systems is expansion.<sup>44</sup> Thus, present trends favor their business plan—and their stock prices. They will continue to expand until the federal government limits their access to student financial aid.

In the selective sector, the economic factors underpinning the high-tuition/high-aid model of private colleges and universities have all been affected. Due to endowment losses elite institutions have had to reduce their budgets, and hence their investments in superior quality. Student aid budgets have been reduced as well, which will result in student peers who are wealthier but not more talented. And, the downward ratchet of college choice means that the thin market for elite education is growing thinner. At the same time, the sticker price for a four-year bachelor's degree now exceeds \$200,000 (2010). Most of the affected institutions entered the great recession in strong condition, and hence will not compromise their eminence anytime soon. But for the less wealthy half of this sector, the deterioration of this model could produce the kind of marketing crisis they endured in the 1970s.

The number of public institutions that belong with the selective sector has been growing steadily. They include most flagship research universities and an increasing number of smaller institutions that have acquired reputations for high standards and quality undergraduate programs. These institutions face cross-cutting forces--greater numbers of talented applicants, but declining appropriations with which to sustain academic quality. Large flagship universities have long been evolving toward greater tuition dependence. Now more than ever their strategy is to raise tuition for state students and recruit larger numbers of out-of-state students (who pay 2-3 times more) in order to sustain their academic core. However, maintaining high quality in this situation requires additional revenue streams, particularly from research. These pressures have forced an "unbundling" of university tasks: universities have increasingly utilized non-tenure track faculty for undergraduate teaching so that regular faculty can engage in research, scholarship and advanced instruction.<sup>45</sup> Thus, the imperative of staying in the forefront of the advancement of knowledge has been, and is likely to continue, forcing internal differentiation in research universities.

Public universities have also sought revenues from intellectual property and involvement with technology based economic development, which feeds these same forces. Such initiatives provide an interesting contrast with private research universities, which have defensively abandoned new commitments and emphasized core constituencies. Public universities, as hard as it may appear under present conditions, will need to expand activities that bring external revenue streams in order to sustain and augment knowledge generating activities.

Such a scenario is predicated on continued public recognition of the crucial contribution of universities to our knowledge-based society. Thus far, reactions to the great recession have looked to the American competitive advantage in research and innovation to help alleviate economic woes. This attitude is similar to the response to the 1980 recession that produced Bayh-Dole and other structural adjustments. The first half of the current era, however, also harbored a steady drumbeat of criticism of academic research, which culminated in Republican threats of severe cutbacks in the mid-1990s. The present recession has yielded no new programs to spur innovation (perhaps enough are already in



place); but faith in the promise of economic dividends from academic research has remained strong, and so has funding. Pressures to reduce or narrowly target federal support for research are likely to emerge before long. However, the economic value of universities is now beyond question. There is no substitute for the most advanced knowledge in a knowledge-based economy, and universities are the institutions that can best generate and disseminate such knowledge as well as educate the experts needed to take advantage of it. Industries in which the United States leads the world—like biotechnology or software—did not exist at the beginning of the current era. Future prosperity will no doubt depend on the emergence of new and unforeseen knowledge-intensive industries. After the current belt-tightening passes, universities dedicated to the advancement of knowledge and most closely connected with advancing technological sectors are most likely to lead.

\*\*\*\*\*

Figure 1

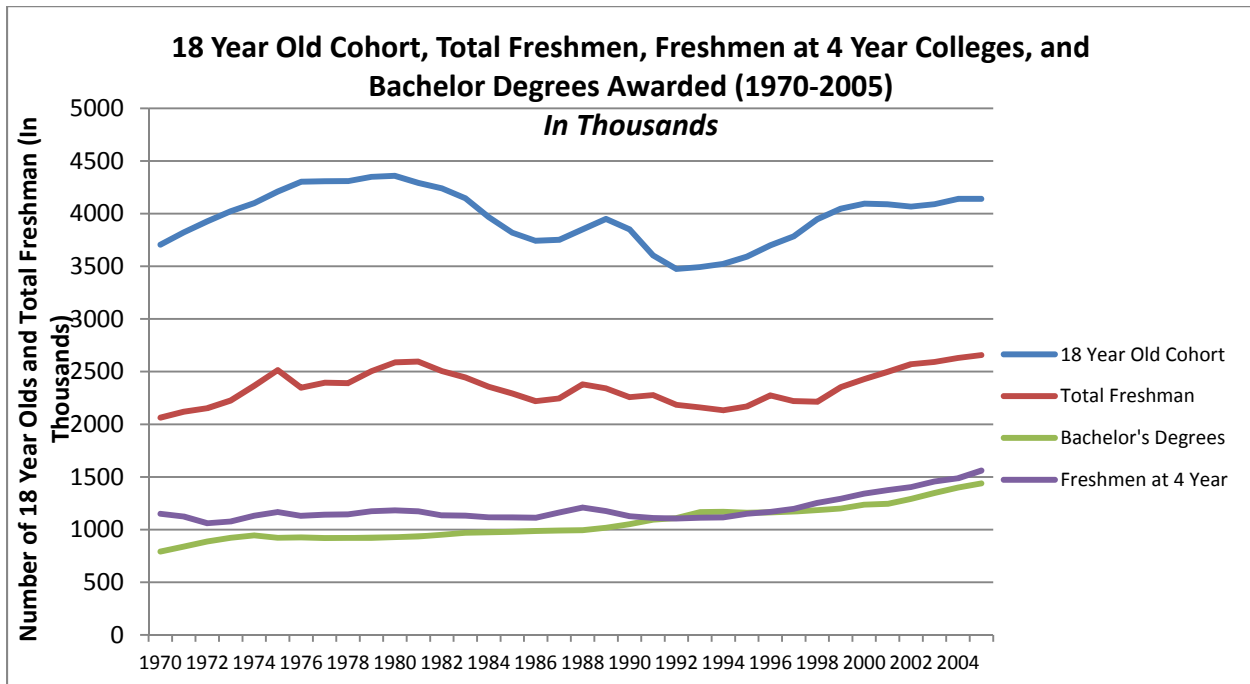
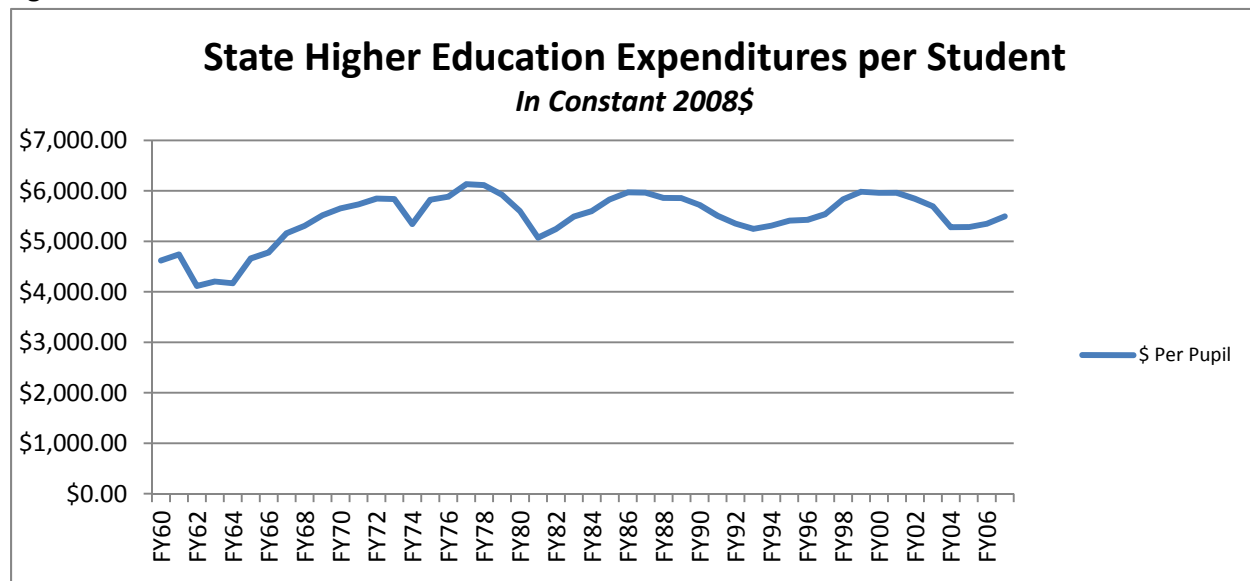
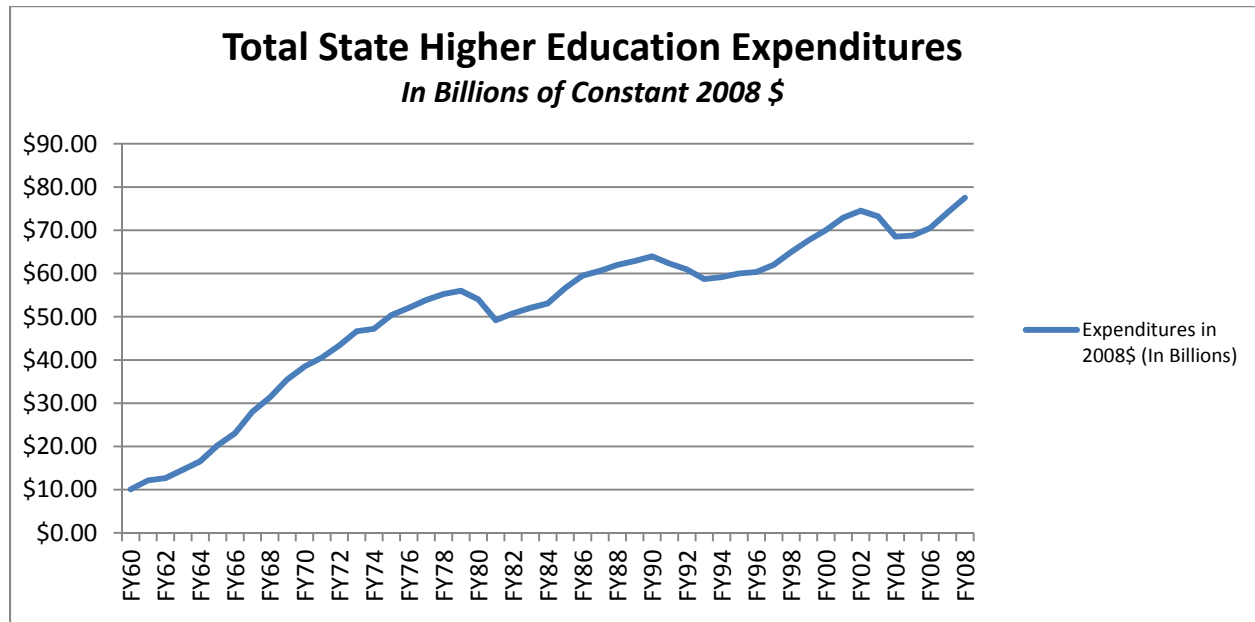


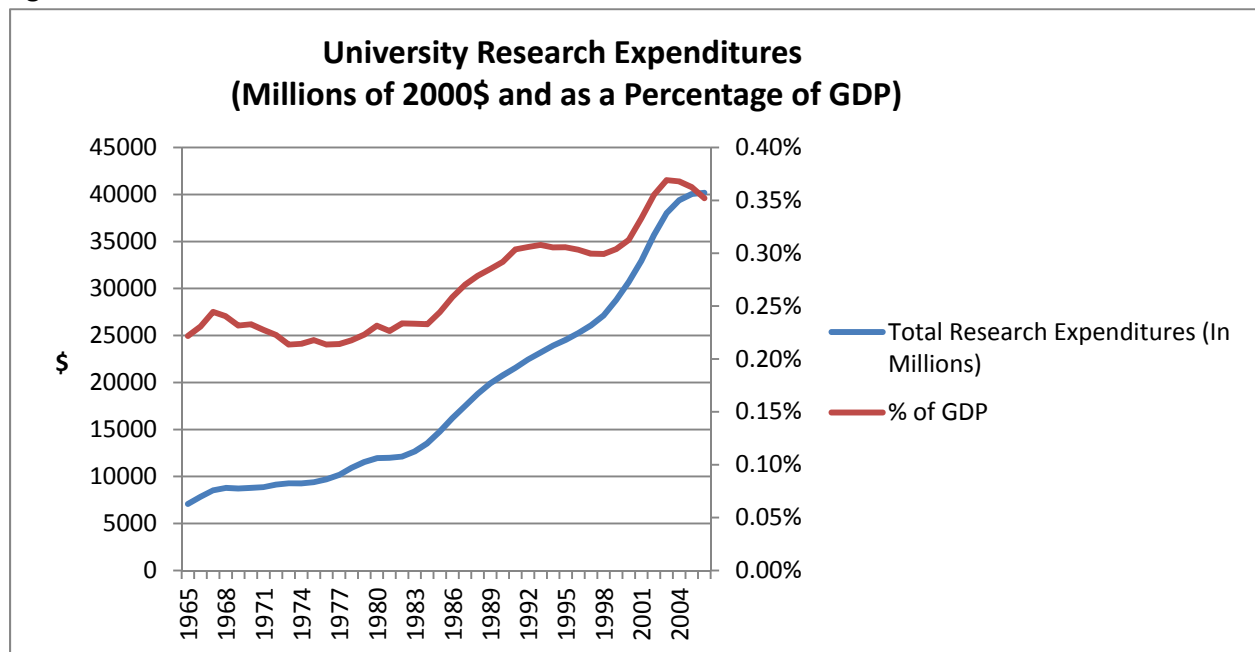
Figure 2



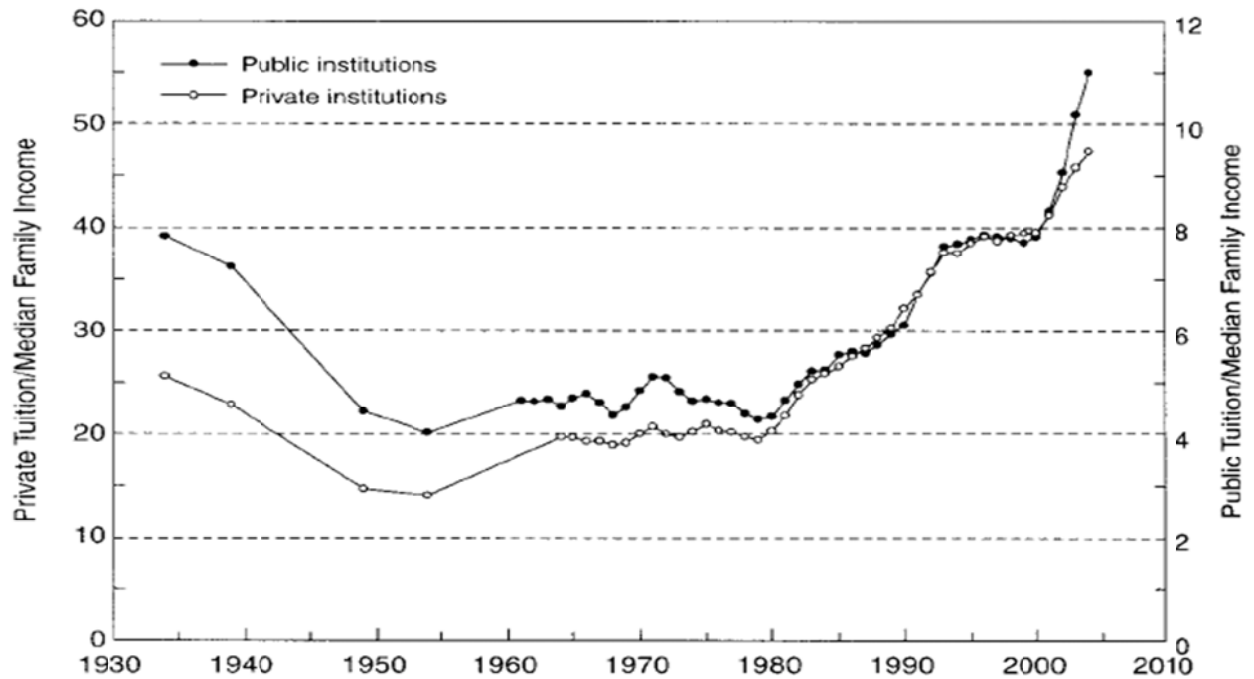
**Figure 3**



**Figure 4**

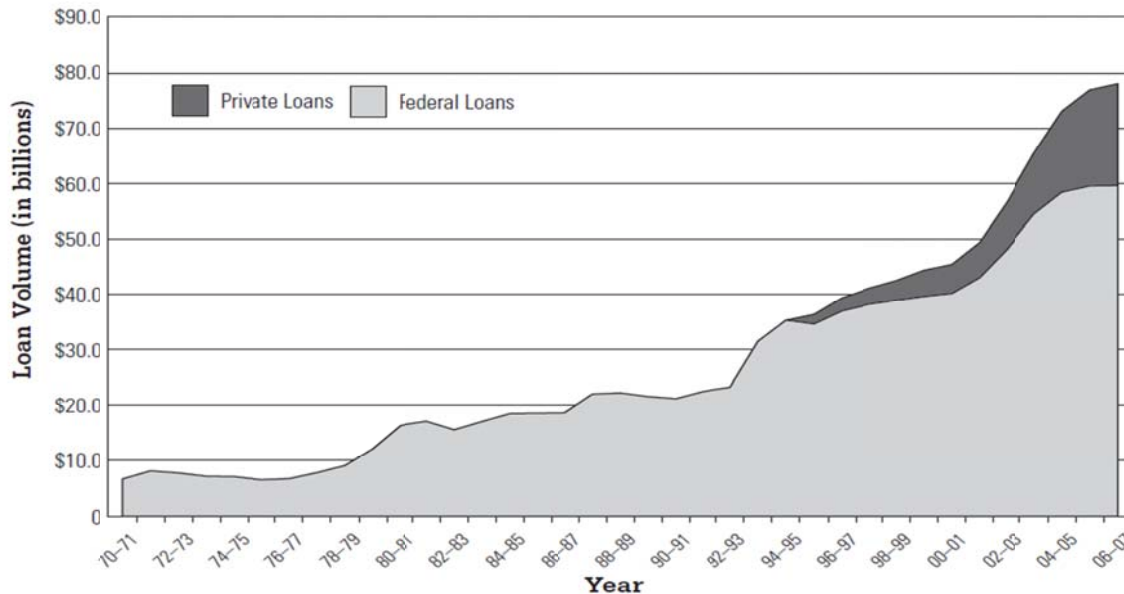


**Figure 5: Tuition Prices Relative to Median Family Incomes, 1930-2005**



Source: Goldin & Katz, *Race between Education and Technocracy*, 276.

**Figure 6: Federal and Private Student Loans, 1970-2006 (current \$).**



SOURCE: Donald E. Heller, "The Impact of Student Loans on College Access" in College Board, *The Effectiveness of Student Aid Policies: What the Research Tells Us* (New York: College Board, 2008), p. 41.

## NOTES

<sup>1</sup> Claudia Golden and Lawrence F. Katz, *The Race between Education and Technology* (Cambridge: Harvard University Press, 2008), 46-57; Robert H. Frank, *Falling Behind: How Rising Inequality Harms the Middle Class* (Berkeley: University of California Press, 2007).

<sup>2</sup> Roger L. Geiger, *Research and Relevant Knowledge: American Research Universities Since World War II* (New Brunswick: Transaction Publishers, 2004 [1993]).

<sup>3</sup> *Digest of Education Statistics, 2007*, Table 189.

<sup>4</sup> Roger L. Geiger, "Demography and Curriculum: the Humanities in American Higher Education, 1945-1985," for David A. Hollinger, Ed., *The Humanities and the Dynamics of Inclusion Since World War II*. Baltimore: Johns Hopkins University Press, 2006. 50-72.

<sup>5</sup> Claudia Goldin, Lawrence F. Katz, and Ilyana Kuziako, "The Homecoming of American College Women: the Reversal of the College Gender Gap," *Journal of Economic Perspectives*, 20, 4 (Fall 2000): 133-56.

<sup>6</sup> While access was a widely shared objective, reflected in the Education Amendments of 1972 and the build-out of community colleges, lack of confidence was expressed toward university appeasement of radical students and rising nominal costs (which reflected inflation). One expression of this was the imposition of extensive federal regulation.

<sup>7</sup> Roger L. Geiger, *Research and Relevant Knowledge: American Research Universities Since World War II* (New Brunswick: Transaction Publishers, 2004 [1993]), 173-97.

<sup>8</sup> Roger L. Geiger, *Knowledge and Money: Research Universities and the Paradox of the Marketplace* (Stanford: Stanford University Press, 2004), 36-42.

<sup>9</sup> James Hearn, "The Paradox of Growth in federal Aid for College Students: 1965-1990," *Higher Education: Handbook of Theory and Research*, vol. 9, (New York: Agathon, 1993); Edward P. St. John, *Refinancing the College Dream: Access, Equal Opportunity, and Justice for Taxpayers* (Baltimore: Johns Hopkins University Press, 2003).

<sup>10</sup> Roger L. Geiger, *Knowledge and Money: Research Universities and the Paradox of the Marketplace* (Stanford: Stanford University Press, 2004), Chapter 2.

<sup>11</sup> *Chronicle of Higher Education, Almanac Issue, 2009-2010*, 13, 33; Christina Chang Wei, et al., *2007-08 National Postsecondary Student Aid Study. First Look*. (NCES: April, 2009).

<sup>12</sup> The following draws from Geiger, *Knowledge and Money*, Chapter 3.

<sup>13</sup> Carolyn M. Hoxby, *How the Changing Market Structure of U.S. Higher Education Explains College Tuition*, National Bureau of Economic Research, Working Paper 6323 (December, 1997).

<sup>14</sup> Economists measure quality in terms of wealth or spending, but students appreciate the effects of spending in campus amenities, etc. The alternative to qualitative competition (greater spending) is price competition, which in its cruder forms tends to restrict inputs, attract less qualified students, and diminish quality.

<sup>15</sup> Gordon Winston writes of this situation, "hierarchy based on donative resources become highly skewed"; however, any attempt to opt out of the arms race would be "fiduciary irresponsibility": "in a positional market, there's [sic.] never too much of a good thing ... and in the hierarchy, wealth is fundamentally a good thing" (27, 31).

- 
- <sup>16</sup> James Monks and Ronald G. Ehrenberg, "The Impact of *U.S. News and World Report* College Rankings on Admissions Outcomes and Pricing Policies at Selective Private Institutions," NBER, Working Paper 7227, (July 1999).
- <sup>17</sup> Winston, 1999, p. 30; Geiger, *Knowledge and Money*, 84-5.
- <sup>18</sup> For a working definition of the selective sector, social scientists have divided American higher education into seven tiers. Tier one consists of 44 institutions, all private except for the three military academies. Tier Two is 85 institutions, 65 private and 20 public research universities. See Joseph Soares, *The Power of Privilege: Yale and America's Elite Colleges* (Stanford: Stanford University Press, 2007), 176-7.
- <sup>19</sup> Caroline M. Hoxby, "The Changing Selectivity of American Colleges," NBER Working Paper 15446. (October 2009).
- <sup>20</sup> These studies are summarized by Soares, *Power of Privilege*, 130-35, 176-77; and analyzed further by Liang Zhang, *Does Quality Pay? The Benefits of Attending a High-cost, Prestigious College* (New York: Routledge, 2005).
- <sup>21</sup> *The American Freshman: National Norms for Fall*, 2008, UCLA Higher Education Research Institute; W. Norton Grubb & Marvin Lazerson, *The Educational Gospel: the Economic Poser of SSchooling* (Cambridge: Harvard University Press, 2004), p. 68.
- <sup>22</sup> Report of the Commission Appointed by Secretary of Education Margaret Spellings, *A Test of Leadership: Charting the Future of U.S. Higher Education*. (Washington, D.C.: 2006), p. xii.
- <sup>23</sup> Steven Brint, et al., "From the Liberal to the Practical Arts in American Colleges and Universities: Organizational Analysis and Curricular Change," *Journal of Higher Education*, 76, 2 (March 2005): 151-180, quotes pp. 173-174; Grubb & Lazerson, *Education Gospel*, 64-69.
- <sup>24</sup> *Digest of Education Statistics, 2009*; "Community College Enrollment Surge," AACC Policy Brief 2009-001 PBL, (December 2009).
- <sup>25</sup> *Research and Relevant Knowledge*, 303-8.
- <sup>26</sup> For background, see *ibid.*; Mowery, et al., *Ivory Tower*, 85-95. See also, U.S. General Accounting Office, *Technology Transfer: Administration of the Bayh-Dole Act by Research Universities*, GAO/RCED-98-126 (May 1998).
- <sup>27</sup> The following draws from Roger L. Geiger & Creso M. Sá, *Tapping the Riches of Science: Universities and the Promise of Economic Growth* (Cambridge: Harvard University Press, 2008).
- <sup>28</sup> *Knowledge and Money*, 147.
- <sup>29</sup> *Ibid.*, Chapter 6.
- <sup>30</sup> See Paul Attewell in this volume.
- <sup>31</sup> <http://www.postsecondary.org/default.asp>.
- <sup>32</sup> Claudia Golden and Lawrence F. Katz, *The Race between Education and Technology* (Cambridge: Harvard University Press, 2008), 347-50. A different interpretation of the college completion is offered in William G. Bowen, Matthew M. Chingo, and Michael S. McPherson, *Crossing the Finish Line: Completing College at America's Public*

---

*Universities*. Princeton: Princeton University Press, 2009. These issues are discussed in Roger L. Geiger, "Review Essay: American Malaise: Lagging College Attainment in the United States," *American Journal of Education*, (forthcoming).

<sup>33</sup> National Center for Education Statistics, "The Nation's Report Card: NAEP Trends in Academic Progress" (NCEA: 2009), pp. 12-13; National Center for Education Statistics, *Remedial Education at Degree-granting Postsecondary Institutions in Fall 2000* (Washington, D.C.: NCES, 2003), 18.

<sup>34</sup> Goldin & Katz, *Race*, 328.

<sup>35</sup> Such an explanation seems consistent with research findings: Ernest T. Pascarella & Patrick T. Terenzini, *How College Affects Students*, vol. 2 (San Francisco: Jossey-Bass, 2005), 416.

<sup>36</sup> "Expenditures per student are important to graduation rates. State governments that ignore this fact and call for higher graduation rates and do not increase funding (but rather cut funding) will not have success": Gary L. Blose, et al., "The Effects of Institutional Funding Cuts on Baccalaureate Graduation Rates in Public Higher Education" in Ronald H. Ehrenberg, ed., *What's Happening to Public Higher Education* (Westport, CT: Praeger, 2006), 71-82, quote p. 77; John Bound, Michael Lovenheim, and Sarah Turner, "Why Have College Completion Rates Declined? An Analysis of Changing Student Preparation and Collegiate Resources," NBER Working Paper 15566 (December 2009).

<sup>37</sup> Goldin & Katz, *Race*, 303.

<sup>38</sup> Roger L. Geiger, "High-tuition/High-aid: the Road Paved with Good Intentions." ASHE Annual Meeting, (November 2000); "Financial Barriers to Higher Education for Dependent Undergraduate Students, 2008" *Postsecondary Education OPPORTUNITY*, 204 (June 2009).

<sup>39</sup> *Knowledge and Money*, quotes p. 89 & 116.

<sup>40</sup> Joseph Soares, *The Power of Privilege: Yale and America's Elite Colleges* (Stanford: Stanford University Press, 2007), 128.

<sup>41</sup> Cf. David Brooks, *Bobos in Paradise: the New Upper Class and How They Got There* (New York: Simon & Schuster, 2001).

<sup>42</sup> Jim Sidenius, et al., *The Diversity Challenge: Social Identity and Intergroup Relations on the College Campus* (New York: Russell Sage, 2009).

<sup>43</sup> At last count (5/2009) 637 colleges and universities had pledged to work toward "climate neutrality," as soon as possible. These institutions run the gamut from community colleges to elite private colleges: American College and University Presidents Climate Commitment.

<sup>44</sup> Roger L. Geiger, "The Publicness of Private Higher Education: Examples from the United States" in Jurgen Enders and Ben Jongbloed, eds., *Public-Private Dynamics in Higher Education: Expectations, Developments and Outcomes* (New Brunswick: Transaction Publishers, 2007), 139-56.

<sup>45</sup> Peter McPherson and David Shulenburg, "University Tuition, Consumer Choice and College Affordability: Strategies for Addressing a Higher Education Affordability Challenge," NASULGC [APLU] Discussion Paper (November 2008), 49-55; Roger L. Geiger, "Optimizing Research and Teaching: the Bifurcation of Faculty

---

Roles at Research Universities” in Joseph C. Hermanowicz, ed. *Academic Profession* (Baltimore: Johns Hopkins University Press, in press).