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American Higher Education Trends and Risks

SHAPING A NEW ERA

The Forum for the Future of Higher Education and the Social Sector Practice of McKinsey & Company have undertaken a multiyear collaboration focused on the factors that will drive the evolution of the higher education sector, for better or worse, going forward. From a historical perspective, the success of American higher education is unparalleled. The key questions at hand are what changes are under way, and what the implications of such changes are for performance in terms of education, research, and the societal obligations of colleges and universities. In phase II of the McKinsey Project on Global Higher Education, Paul Jansen and Deborah Bielak outline and assess the trends and "shocks" they see affecting American higher education. Molly Broad, president of the American Council on Education (ACE); Lloyd Armstrong, provost emeritus of the University of Southern California; and Pamela Gann, president of Claremont McKenna College, address how diverse types of institutions might be affected by and how they are responding to those trends and shocks. At this point the trends appear to be particularly challenging, with widely varying long-term effects for individual institutions. Yet over time the changes they portend may prove to be positive opportunities for higher education overall.

NOTEBOOK

- The trends and shocks affecting the sector going forward do not stem solely from any action or inaction on the part of higher education leaders but rather are consistent with broader global trends evident in many industries.
- "Excellence" has become a mission driver at private research universities, with a focus on traditional undergraduate and graduate education and research and a mindset that if something is worth doing it is worth doing better. Top institutions lose money on everything they do, and losing money has become a surrogate for excellence.
- Liberal arts colleges do a very good job at fundraising but have no incentive to expand because they lose money on every student. They also don't want to lower their admissions selectivity or negatively affect their endowment-per-student figures. Growth is not part of their mission.
- A delivery model with ever-rising prices that few can afford and that cannot cover its costs without philanthropic support simply will not scale in America—much less in Asia or the African continent or elsewhere.

The Structure-Conduct-Performance (SCP) framework is essentially a checklist of performance drivers that can be used to assess an industry—including a nonprofit industry such as American higher education. Briefly, American colleges and universities have enjoyed a quite favorable industry structure, one characterized by consistent demand growth and an extremely diverse set of suppliers growing relatively slowly, with no one institution educating more than a very small percentage of the nearly 12.5 million FTE students enrolled. The industry's conduct is relatively benign, with no institution separating itself either in terms of new offerings or a dramatically different approach to costs. Higher education has been relatively unsuccessful at capturing the productivity gains typical of other industries. Indeed, well-endowed institutions are driving costs up by competing to hire the best faculty, for example, and to build the best facilities. Interestingly, unlike most for-profit industries, where the reward for success is growth, the nonprofit higher education industry is not growth oriented. Rather, success tends to be marked more by the accumulation of assets and talent.

The net result of a favorable industry structure and relatively benign conduct has been strong performance against higher education's multidimensional missions. Further, six of the top 10 and 20 of the top 50 ranked higher education institutions worldwide are in the United States (Times Higher Education, http://www.timeshighereducation.co.uk). Research funding has grown dramatically, as has higher education's share of philanthropy.

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Trends and Shocks Affecting the U.S. Higher Education Sector

The trends and shocks affecting the sector going forward do not stem solely from any action or inaction on the part of higher education leaders but rather are consistent with broader global trends evident in many industries. Jansen and Bielak outline five key trends of particular interest because of their potential to affect either the structure of or conduct within the higher education sector and, therefore, their possible impact on individual institutions or the performance of the sector as a whole:

- Growth in number of nontraditional and digital students
- Price-cost-productivity squeeze
- New paradigm competitors
- Globalization
- Accountability to increasing societal expectations

Growth in Number of Nontraditional and Digital Students

In 2005, nontraditional students—students over the age of 24 and enrolled part-time—comprised 48% of the 18.1 million students enrolled in the nation's four- and two-year institutions. Their numbers range from 5% of the student body at top liberal arts institutions to 70% at two-year colleges. Other trends indicate that the numbers of nontraditional students will continue to increase: While the number of high school graduates is expected to remain steady or slightly decline for the next several years, projected increases in the high school graduation rate and the percent of college-ready graduates could combine to increase the number of college-seeking graduates from 1.0 million to more than 2 million between 2005 and 2015. The traditional U.S. higher education model simply cannot absorb these new students, nor will many of them be able to afford the high costs of the traditional full-time model anyway. Further, shifts in the nation's economy and workforce are increasing the need for continuing and lifelong education on the part of older Americans.

Younger students have "grown up digital," meaning additional changes to the traditional student body. Social networking web sites, user-generated content, sophisticated simulation games, and avatar-based persistent social worlds are changing how teens interact and expect to learn (BBC News, http://news.bbc.co.uk/1/hi/sci/tech/1834682.stm). They are fully capable of handling and, indeed, fully expect digital course material, innovative online courses, and online networking applications. These developments challenge traditional notions of where, how, and when students will learn. Faculty will need institutional support to create new approaches that fully leverage new technology capabilities and in so doing create learning products with applicability outside their own classes. Institutions that create customized online learning experiences will likely have lower incremental costs, improved learning results, and opportunities to exploit their intellectual capital and build brands that touch millions rather than thousands of students.

Price-Cost-Productivity Squeeze

From 1996 to 2006, average tuition and fees rose 32% and 51% in constant 2006 dollars at private and public four-year institutions, respectively (although tuition discounting in the form of financial aid has affected that revenue growth to widely varying degrees). Costs have grown tremendously too: From 1984 to 2004, average instructional costs at all four- and two-year institutions in the United States rose 32%, while average administrative costs rose 68%, in constant 2004 dollars per student.

In most industries, when pricing starts to hit limits and costs are going up, increases in productivity help to maintain profit margins. Measuring productivity in higher education is complicated and challenging. One possible measure, the student–faculty ratio, declined 5% between 1989 and 2005, which could be interpreted as a decrease in productivity but, on the other hand, could signal an increase in quality. Degrees granted per faculty, another flawed but suggestive indicator, showed a modest 10% improvement over the same 16-year period. There were wide variations in both metrics by type of institution, and in all cases faculty-related costs are a huge cost driver, with the outlook for continued pressure remaining high.

The key question with respect to the price-cost-productivity squeeze is whether business as usual is sustainable going forward. Jansen and Bielak believe the answer will vary by segment: The best-endowed, highly selective institutions enjoy unprecedented levels of resources and extremely high demand, which means more pricing freedom and less pressure over the near and medium term. For those institutions in the vast middle, though, it is much harder to see how the current economic model can sustain itself. Costs continue to grow, but raising prices is harder and harder to do. In this scenario, it all comes down to productivity—particularly since new competitors are on the heels of the middle group of institutions. Institutions that devise and implement productivity improvements that change the current economic model likely will be the ones that thrive.

New Paradigm Competitors

Two types of new paradigm competitors—online institutions and scale seekers, which frequently are for profit—have the potential to create models that could disrupt the historic higher education dynamic. The online market is growing fast. In 2004, 2.3 million students took at least one online course; the following year, 2005, 3.2 million students did so. Nearly two-thirds of the nation's largest institutions (with enrollment above 15,000) offer fully online programs. Significantly, the credibility of online programs is increasing. Surveys show that the number of employers who prefer traditional degrees to online-delivered diplomas has declined rapidly such that it now stands at just over 50%, and, within academia, more than 60% of chief academic officers surveyed recently felt that the learning outcomes in their institutions' online programs were comparable or better than in their traditional programs. Regulatory changes in early 2006 to allow federal student aid for online learning reflect this increased credibility. Finally, if the push for accountability (see trend No. 5 discussed below) were to lead to credentialing by testing, online competitors would likely make a giant leap forward.

Scale seekers have the potential to change the underlying economic model by lowering costs through economies of scale. Perhaps the best example of the possibilities of scale in the for-profit realm is Wal-Mart. As Wal-Mart drives its volume up, it continuously ekes out small improvements in its profitability while always improving the value to customers. Large public universities are also showing modest scale effects as their costs per student are declining as enrollment increases, but these effects pale compared to that experienced by the largest for-profit educators. Since 2000–01, the University of Phoenix's costs have declined by almost one-third and its enrollment has soared to approximately 250,000 students. Costs per student are dropping as the university has begun to capture scale and leverage online tools.

The University of Phoenix has high aspirations for continued growth, both in the United States and abroad. Assuming they can hit the mark on quality—which steady profits will facilitate—then the University of Phoenix could successfully disrupt the prevailing higher education dynamic. These online and scale-seeking competitors target the middle market and thus are less likely—at least at this stage—to be of concern to top-tier institutions. That said, it is reasonable to expect that their quality could continue to increase over time and a disruption scenario such as that which Christensen has outlined elsewhere in this volume could occur.

Globalization

With trade barriers falling, technology making information globally available, rapid shifting of economic centers of activity, and newly emerging consumer markets, the modern university is being challenged by globalization as well. Universities will need to globalize the student experience, shift research agendas, and internationalize faculty and student bodies—all at a time when new international competitors are being created at unprecedented rates. Globalization means more competition for students, whose options are growing as their horizons expand and quality increases throughout the world. On an individual scale, it means more competition for jobs for graduates and, from a national perspective, it means more competition for the United States as it struggles to maintain its global economic primacy. Where to compete, where to collaborate, and how to orchestrate decentralized academic departments are the questions new senior-level globalization coordinators at leading institutions are looking to answer.

Possible responses include the following:

- Expanding international recruiting to increase the roughly 3% of the nation's undergraduate students who are international
- Shifting course content and research toward more languages and cultures to better prepare students to be global citizens
- Globalizing the student experience by increasing the less than 1% of undergraduates who study abroad
- Internationalizing the faculty to increase understanding and generate new ideas and perspectives
- Enhancing global presence by developing initiatives and partnerships with colleagues and institutions in other countries
- Establishing a central office for globalization to spark and coordinate efforts

Some schools are already creating separate international enrollment management units to tap the global market. We expect responses to globalization to differ greatly by type of institution, but all colleges and universities will need to respond to these forces shaping the world.

Accountability to Increasing Societal Expectations

Pressure on the higher education sector to justify and account for its price, costs, outcomes, and more is intense. Further, expectations for the sector's societal contributions are increasing as well, as American demographics shift at the same time that globalization demands a more educated and competitive workforce. Again, institutional responses will vary across segments, in terms of both their nature and effectiveness. Some of the possibilities put forth in the 2006 report of the Spellings Commission, which emphasized the need for greater accountability and access, include the following:

- Improving college readiness and pathways to higher education
- Bolstering funding and streamlining the financial aid process
- Measuring and rewarding productivity and efficiency,
- Improving tracking and communicating of student learning outcomes
- Encouraging innovation and collaboration
- Expanding reach to adults and improving vocational training
- Increasing support for and carefully targeting research

Some institutions will rise to meet these demands and strengthen their positions. Others will fare less well under the close scrutiny of greater transparency. The sum total of these trends will most likely improve performance of the higher education sector overall and make them worthy of broad support.

Perspective: The Public Sector

Molly Broad, currently president of ACE, discussed the ramifications of these trends from the perspective of her position as president emeritus of the University of North Carolina.

The effect of globalization in North Carolina, where the number of low-skill jobs has declined by 20% in the last 30 years, is not unlike that of many other states. Meanwhile, the number of professional and managerial jobs has increased rapidly, and since 2000, only the wages of college graduates have increased above inflation. As a result, the income disparity between high- and low-skill jobs is widening, with fewer families left in the middle class. Globalization has changed the jobs that North Carolinians compete for faster than the state has been able to increase their level of educational attainment. Meanwhile, the state is undergoing a demographic transformation, with an increasingly ethnically and racially diverse population, particularly in younger households. More and more students are entering college underprepared and/or with no prior family experience with higher education, resulting, to date, in declining rates of degree production.

That reduces productivity both at the institutional level and, Broad believes, later on in the workforce as well. In the future, North Carolina's economic growth will be fueled by immigrant and minority populations; likewise, to maximize economic growth, the state must tap the potential and provide higher education opportunities to all segments of its population.

The declining share of state funds has forced the privatization of public higher education, resulting in higher tuition and an increasing sense that higher education is less of a public good and instead more of a private good that benefits the individual. That said, there also seems to be a growing recognition on the part of government officials of the potential of public universities to contribute to the economic and cultural development of their regions. Broad notes that the state of North Carolina now provides funding to the university for research focused specifically on areas that have been identified as key to helping the state transform its economy. She sees a growing connection between regional economic growth interests and the research mission of public universities.

Finally, Broad discussed accountability issues, noting that the heart of the matter is to enhance learning outcomes. She emphasized the importance of focusing on productivity, value added, and quality. The fact that measuring learning outcomes is complex and difficult is no reason to not attempt to improve outcomes. Indeed, failure to improve the hard and soft skills of the American workforce will inevitably lower our standard of living. Clearly, American economic dominance and the preeminence of American higher education are being challenged. Broad urged that these challenges be acknowledged, taken seriously, and vigorously tackled.

Perspective: Private Research Universities

Lloyd Armstrong, provost emeritus of the University of Southern California, focused his comments on the price-cost-productivity squeeze from the perspective of a large private research university.

From 1987 to 2007, average tuition, fees, and room and board for private four-year colleges and universities rose 66% above inflation. Increases in financial aid bring the price down to approximately a 55% increase. Only families in the top 10% of income distribution have seen wage increases at similar rates. For everyone else, from 1974 to 2004 (a longer time frame), median family income in the United States rose just 9%.

Armstrong believes that prices at private institutions are closer to their limits than most are willing to recognize—which means that the price-cost-productivity squeeze is going to tighten faster than most realize, making it difficult to respond to both this shock and the others described herein. Armstrong points to the private sector's missions as boxing them in and limiting responses. "Excellence" has become a mission driver, with a focus on traditional undergraduate and graduate education and research, and a mindset that if something is worth doing it is worth doing better. This leads to rising costs, which students and families can't afford, and the gap is filled by philanthropy. Top institutions lose money on everything they do, and losing money has become a surrogate for excellence.

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The current model, dependent on price increases above inflation and philanthropy, is deeply flawed—particularly given the need to ensure access to the broadest swath possible of the demographically transforming American population. Armstrong urges private universities to think out of their mission boxes and consider experimentation and innovations that offer opportunities to diversify revenue sources and make money. Nontraditional older students, for example, are fueling significant demand, but private universities' missions eschew going after them. That mindset leaves millions of potential customers on the table, and the new paradigm competitors are scooping them up. In the realm of lifelong learning—certainly not too much of a stretch out of the mission box—the private sector could focus less on excellence, the pursuit of which seems never to end, and aim to simply be good enough.

Armstrong suggests that globalization presents opportunities to reconceptualize the private sector's mission and business model—and indeed will ultimately force that change as the traditional model nears its tipping point. He points to online education as offering the possibility of reaching far more students at lower costs with limited, if any, effect on quality, at which point the need for good measures of student learning outcomes becomes obvious. Armstrong urges private institutions to embrace outcome measures now so that they can move away from surrogates for excellence such as losing money and instead focus on increasing productivity. To make that happen, he suggests that institutions house some form of a subsidiary that would be independent of the constraints of current mission boxes and free to envision new missions and models.

Perspective: Private Liberal Arts Colleges

Pamela Gann also centered her comments largely on the price-cost-productivity squeeze, from the perspective of her position as president of Claremont McKenna College, a liberal arts institution.

Private liberal arts colleges are caught in the same sort of price-cost-productivity squeeze as their large private research university counterparts. Gann notes that the two segments resemble each other more than one might realize, including, for example, with regard to the faculty they recruit. The majority of the faculty candidates Gann interviews are also candidates at research universities. Liberal arts colleges pride themselves on offering an intimate learning environment, with a low student-to-faculty ratio. But faculty salaries and benefits are rising far faster than tuition prices and inflation—at the same time that teaching loads are declining and leaves are increasing. Further, capital costs are extremely high at liberal arts colleges, where the students live on campus and the facilities arms race is in full swing. Yet physical plant use is low, as most buildings are seldom used during the evenings or on weekends—nor on Friday, when classes are rare. Thus, by any business standard, the efficiency of the use of capital is extremely low.

The mission of private liberal arts colleges, similar to private research universities, is centered on excellence. Costs are high, tuition cannot cover those costs, and so philanthropy is crucial to survival. Liberal arts colleges do a very good job at fundraising but have no incentive to expand because they lose money on every student. They also don't want to lower their admissions selectivity or negatively affect their endowment-per-student figures. Growth is not part of their mission.

Private liberal arts colleges are innovating and implementing changes in response to the trends outlined herein. Claremont McKenna has significantly increased its international recruiting efforts both to offset the coming decline in U.S. high school graduates and to enroll enough international students to create a small global learning community. This task is complicated by the fact that the "liberal arts" and even the word "college" are misunderstood outside the United States. Indeed, Claremont McKenna is often mistaken for a high school. (With regard to its faculty, U.S. Ph.D. programs have become so internationalized that going forward, Claremont McKenna expects that 40% to 50% of its new faculty hires will be foreign born.) Middlebury College, renowned for its languages program, has globalized its curriculum and reach by formally affiliating with the Monterey Institute of International Studies.

In terms of research, Claremont McKenna has 11 institutes in varied fields, including, for example, the Rose Institute, which receives funding and conducts targeted research for state and local governments. Harvey Mudd College and the Olin College of Engineering have programs in which interdisciplinary teams of faculty and students work cooperatively with corporations and laboratories to solve their real-world technical problems.

As for accountability, Gann is certain that liberal arts colleges will do quite well on learning outcomes measures because of their intimate, residential model of undergraduate education. With that in mind, she is encouraging her faculty to embrace the accountability movement, which she believes is only going to gain momentum.

Conclusion

The traditional model of American higher education historically has been tremendously successful. The question today is whether that model is sustainable going forward in light of the diverse needs of a growing population in the United States and worldwide. A delivery model with ever-rising prices that few can afford and that cannot cover its costs without philanthropic support simply will not scale in America—much less in Asia or the African continent or elsewhere.

The nonprofit U.S. higher education sector would do well to creatively respond to the trends and shocks shaping its environment by controlling costs, increasing productivity, focusing more on serving nontraditional and digital students, and improving learning outcomes to prepare students for competing in a globalized world. If traditional colleges and universities cannot or choose not to reconceptualize how they deliver higher education, then new paradigm competitors are poised to fill the void and render them increasingly irrelevant. These relatively new entrants, who already enroll hundreds of thousands of students around the globe, are the current focus of the ongoing collaboration between the Forum for the Future of Higher Education and McKinsey & Company and are the topic for its session at the Forum's 2008 Aspen Symposium.

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