

POSTSECONDARY MARKETS AND STUDENT OUTCOMES

Robert Zemsky, Project Director

This research project investigates how a student's participation in postsecondary education helps shape subsequent academic achievement and employment outcomes. The first phase of research documented the structure of the market for postsecondary education, including its historical context, its segmented structural map, and the role that cost and discounting play in framing institutional strategies and student choices. The project's later activity builds on the market model, using data from a sample of postsecondary institutions to gauge the impact an individual institution has had on the subsequent lives of its graduates. Ultimately, the project will help campuses, students, and parents measure the contributions institutions have made to the academic achievements and employment outcomes of their graduates, and to better understand the nature and needs of students.

Historical Context for the Postsecondary Market

Marvin Lazerson, Principal Researcher

The objective of this study is to capture the historical context in which questions about the nature and value of postsecondary educational outcomes have been raised. Lazerson's analysis asks: When, where, how, and why have Americans since World War II used, or not used, educational results—particularly academic achievement and employment outcomes—when gauging the effectiveness of particular institutions and the efficacy of postsecondary education in the United States? The project also examines efforts to create learning communities on college and university campuses and discusses the ways in which the new technologies are being used to improve learning.

Findings.

Researchers found that American colleges and universities have undertaken numerous efforts to improve teaching and learning on their campuses since 1980, including the introduction of new learning pedagogies, technology-based delivery of curriculum, and teaching centers. However, despite these pedagogical innovations, the authors found scant evidence of deeper systemic reform including efforts to overhaul incentive and reward systems heavily oriented toward research.

One set of findings suggests that, while there have been considerable debates about economic returns and academic achievement—at different times lamenting the low level of return and learning—these factors appear to have had minimal and short-term consequences for enrollment in postsecondary institutions.

Postsecondary Markets and Student Outcomes

Robert Zemsky and Susan Shaman, Principal Researchers

This project developed a new market taxonomy for postsecondary education for both four- and two-year institutions.

The project team identified sets of institutions that differ in staffing, structure, and finance, as well as in the types of students they serve. Institutions in a given market segment tend to

have and deploy different resources from institutions in another segment; similarly, students attending institutions in one market segment, on average, have different preparation, experience, and educational goals from students attending institutions in another segment. The more distant their market segments, the more likely any two institutions will be significantly different in terms of the means they use to achieve desired educational outcomes.

Researchers refined their taxonomy by grouping institutions according to the percent of their freshmen class graduating within five years and then stratified those institutions further by demand within market segments. The results demonstrated that the boundaries between the major market segments (name-brand, core, and user-friendly/convenience) are coterminous with important structural features of the market itself, and explained upwards of 85 percent of the variance in the tuition rates of both public and private institutions. In assessing the taxonomy and the Collegiate Results Instrument (CRI), Zemsky and Shaman have determined that the driving variable is the percentage of an institution's freshman class that receives the BA within five years or less.

Findings

For four-year institutions, the definitions of Segments 1 through 7 are the following:

- Segments on the left (1, 2, and 3) represent the *name brand* sector of the market, comprising those institutions that draw most of their students nationally and regionally. The schooling within this sector conforms to the classic idea of a four- or five-year baccalaureate education, which is often seen as preparatory work for graduate and professional education.
- Segments on the right (6 and 7) represent the *convenience/user-friendly* sector of the market, comprised of colleges and universities that teach large numbers of part-time and intermittent students who may or may not be seeking a degree.
- Segments in the center (4 and 5) represent the *market core*, where some students seek *name brand* experiences, while others pursue a baccalaureate education on a part-time, often intermittent basis. Institutions on the left of the core, in Segment 4, tilt toward serving as *name brands*; those on the right, in Segment 5, tilt toward the *convenience/user-friendly* part of the market.

Two-year institutions resemble four-year institutions serving the *convenience/user-friendly* part of the market; their segments are further defined in the following way:

- Segment 8 consists of two-year institutions with a degree focus, those that teach more full-time than part-time students and award degrees and certificates to a substantial proportion of their students.
- Segment 10 institutions tend to enroll more part-time students and award few degrees and certificates; their focus is on providing a broad range of courses to what is increasingly becoming an "outlet" or "spot market" for educational services.

- Segment 9 institutions balance their program offerings between a degree focus and a course focus.

Most of the characteristics that matter to higher education—price, cost, the nature of educational program—sort either left-to-right or right-to-left across the seven market segments for four-year institutions and across the three market segments for two-year institutions. For example, among four-year institutions, those in the *name brand* segment of the market are the most expensive, reflecting a higher demand for the educational experience they offer; price declines proportionally moving from left to right across the segments.

Two key student characteristics map to the continuum that underlies the structure of the market. The first is age. Segments 1 and 2—and Segments 3 and 4, to a slightly lesser extent—are almost exclusively the preserve of the young, those students who are in the pipeline and enrolling in postsecondary education immediately following graduation from secondary schools. Segments 5 through 7, however, are increasingly characterized by older students, those in the swirl who are returning to school after engaging in the labor market to complete a degree or receive skills training. One out of every four undergraduates in the institutions that comprise Segments 6 and 7 was more than 30 years old.

The data detailing the distribution of undergraduates by race/ethnicity across the market segments are similarly ordered. African-American and Hispanic students are over-represented in two-year public institutions and under-represented in both two- and four-year brand name institutions. This pattern may reflect the relatively lower cost and greater accessibility for minority students of institutions that fall toward the right-hand side of the market. Asian-American students, on the other hand, are over-represented in both two- and four-year brand name colleges and universities. More generally, the enrollment of Asian Americans is shifted leftward, following the classic pattern of an immigrant group seeking social and economic mobility through education.

The structure of the market for postsecondary education in general and baccalaureate education in particular is important, primarily because the segment in which a student shops and enrolls often predicts his or her subsequent educational attainment. Ten years after high school, only 43 percent of the students who started at an institution in the *convenience* wing of the market had completed a bachelor's degree. In sharp contrast, more than 90 percent of the students starting at an institution along the most selective edge of the *name brand* wing of the market had completed a bachelor's degree, and nearly 60 percent of them had already engaged in post-baccalaureate study.

The relationship between earnings and market segment extend the pattern, but in an unexpected way. Ten years after high school, the median annual salary and wages for holders of baccalaureate degrees without further education hardly differed across the first four segments, despite the fact that graduates of institutions in Segments 3 and 4 paid between 50 and 75 percent of the tuition paid by students attending institutions in Segments 1 and 2.

For members of the high school class of 1982 who graduated from a selective *name brand* institution (Segments 1 and 2) and earned at least a master's degree within ten years of high school graduation, the payoff was more apparent—not in the median wages earned, but in terms of the chance to earn substantially higher incomes at the top of the distribution.

Indeed, one out of four of these graduates with full-time jobs reported earning more than \$60,000 in 1992. What is clear is that the additional cost of attending a highly selective *name brand* institution paid off by providing a substantially greater probability that graduates would pursue and attain post-baccalaureate degrees, and therefore enjoy an above-average salary—though nothing is guaranteed. If the student did not take the medallion earned by attending a highly competitive, highly selective institution and convert it into a professional post-baccalaureate degree, the economic advantages expected to be attached to a selective *name brand* degree did not materialize.

The taxonomy demonstrates that there is a highly segmented market for postsecondary education that is almost exclusively defined by market position. By providing an overall structure of the market for two- and four-year institutions, the taxonomy documents how institutional economies, faculty profiles, student characteristics, educational attainment, labor market outcomes, and civic engagement differ across market segments. The taxonomy similarly provides a framework for understanding the public policy issue most likely to dominate public discussions of higher education: the cost and price of an undergraduate education.

Understanding the Outcomes of Postsecondary Education

Robert Zemsky and Susan Shaman, Principal Researchers

This project involves the development and testing of an institutionally-based instrument for measuring collegiate results – the Collegiate Results Survey (CRS) – which describes likely outcomes for an institution’s graduates six years after receiving their BA/BS. The goal of this activity is to develop a more complete understanding of the market for postsecondary education, one in which quality judgments are based on outcomes and comparisons are made among institutions in a given market segment, rather than across the full spectrum of baccalaureate and two-year institutions.

NCPI researchers have completed the testing of the CRS with more than 80 schools participating in the Knight Higher Education Collaborative, and yielding 38,000 completed instruments from the graduates of these institutions. Researchers also developed a Web-based reporting utility that institutions can access to generate reports along a number of dimensions about their graduates’ responses to the CRI.

Findings

The Collegiate Results Survey provides a practical framework for information relating to student and family educational choices and is now licensed to Peterson’s Guides as a commercial product to be used in conjunction with Peterson’s published guides and its website, CollegeQuest.com. Peterson’s CRI-based website, Bestcollegepicks.com has been launched.

Questions of Finance: Costs, Financial Aid, and Institutional Choice

Robert Zemsky, William Massy, Morton Schapiro and Michael McPherson, Principal Researchers

Because the underlying dynamic of the market for postsecondary education is the sum of student needs and choices, the issues of cost and financial aid play a significant role in

influencing the structure of the market. Increases in the underlying cost of an undergraduate education (expenditures per student) has been touted as one of the primary reasons for a concomitant rise in tuition. Tuition hikes, in turn, have made many students and parents rethink their educational choices, and caused numerous institutions to increasingly discount their sticker prices to attract certain students.

Using data from National Postsecondary Student Aid Survey (NPSAS), Michael McPherson and Morton Schapiro have been investigating how different forms of financial and merit aid affect the ability of students from different socioeconomic and demographic groups to attend school and to attend the type of institution that best meets their needs. By examining data on financial aid, with results of the new classifications available using NCPI's Market Taxonomy, McPherson and Schapiro seek to explore the interplay of market forces, college prices, and the availability of student financial aid.

McPherson and Schapiro are examining the role that income plays in enrollment at selective institutions, how gender interacts with income in determining college choice, and how colleges are responding to intensified competition for students by adopting an instrumental view of student aid as part of an enrollment management strategy.

McPherson and Schapiro have found that federal and state governments and colleges are currently pulling away from the framework of objectively measuring need and working as partners with students to meet that need—a perspective that has dominated thinking about higher education finance for the past 40 years. If restoration of a commitment to the principles of need-based aid is unreachable, McPherson and Schapiro believe it may well be time to give serious attention to more basic alternatives, and are currently seeking to develop such an approach.

Knowing Your Customers: The Household Survey

Robert Zemsky and Margaret Goertz (of the Consortium for Policy Research in Education), Principal Researchers

The National Heads of Household Survey was undertaken in conjunction with the National Center for Public Policy and Higher Education, the Public Agenda Foundation, and the Consortium for Policy Research in Education (CPRE). It focuses on shifting attitudes toward postsecondary education in relation to attitudes toward the market for college graduates, and attitudes towards secondary education. The National Household Survey will complete the triptych of key measures of the standing and value of postsecondary education in the United States. The other two critical data collection efforts are the National Employer Survey and the CRS.

Findings.

The Household Survey was designed to sample a group most interested in higher education—parents of high school students. Slightly more than 1,000 respondents were drawn from the general public. In addition, the survey oversampled 201 white parents, 202 African American parents and 202 Hispanic parents in order to be able to compare their views about higher education. The result, a report completed by Public Agenda entitled "Great Expectations: How the Public and Parents—White, African American, and

Hispanic–View Higher Education," is encouraging for higher education. Researchers found evidence to dispel the notion that parents within minority groups do not value higher education as highly as the general public. In addition, researchers found that 87 percent of Americans believe that a college education has become as important as a high school diploma used to be. And there is virtual unanimity (93 percent) that the price of higher education should not prevent qualified and motivated students from going to college. It is less encouraging, however, to learn that the high marks that the public gives to higher education are not founded on familiarity with it, and that people are much more concerned about the environment, health care, care for the elderly, and the public schools than they are about higher education.

The following is a summary of the report's most significant findings:

Finding One: Higher Education is More Important than Ever. Higher education is perceived as extremely important, and for most people a college education has become the necessary admission ticket to good jobs and a middle-class lifestyle. Parents of high school students place especially high importance on a college education, and African American and Hispanic parents give college an even higher priority than do white parents. All groups believe that the country should ensure that no qualified and motivated student is excluded from a college education because of the cost.

Finding Two: More Than a Degree. To the public, higher education is much more than putting in time and walking away with a sheepskin—the public holds a long list of expectations for higher education institutions. Colleges should help students develop maturity, organizational skills and an ability to get along with others, and should provide specific skills, such as problem-solving and the ability to communicate. People also have high expectations for the institutions themselves. They want institutions to keep the costs down, but they also want to ensure quality by hiring good teachers and holding students to high standards.

Finding Three: The Responsibility Rests with the Student, But Institutions Should Help Those Who Help Themselves. The public, in contrast to how it views K–12 education, tends to emphasize the responsibility of college students, but this does not mean that they exempt higher education institutions from any responsibility. This attitude is manifested in areas such as remediation and financial aid. The public expects schools to help students who are having trouble, but the initiative should come from individuals.

Finding Four: Paying for College Is Difficult but Doable. Despite the often-heard complaints about the high cost of higher education, most people believe that anyone who really wants a college education can get one. Parents say that they are worried about paying for their own children's education, but they also say that they are confident that their children will go to college and that they will work out a way to pay for it. Most people agree that people from low-income families have a more difficult time than others.

Finding Five: High Satisfaction, Low Familiarity—In Contrast with Leaders. The majority of the public believes that higher education is delivering a valuable service and that a college education is available to anyone who really wants one. At least for the moment, the public is satisfied with the nation's higher education, and people are much more likely to focus their attention on other issues that they perceive as more problematic. For a variety of reasons, most Americans do not know a great deal about the details of higher education administration and financing, and have not yet taken a position on some of the questions and debates about higher education that have engaged the nation's business leaders.