This chapter presents the history behind the movement to collect data on intercollegiate athletics.

Making Money—or Not—on College Sports

Welch Suggs

One day, stroll around the athletics facilities at a big-time college. Check out the football stadium, where row upon row of stands are topped by massive edifices containing opulent skyboxes, airy press boxes, and banks upon banks of lights for night games. Wander through the weight rooms. Finally, walk down to the athletics department's business office, which is probably on the same corridor as the athletics media relations office, the sports marketing office, and perhaps the department for academic advising, medical consultation, and other areas. If asked politely and if the university is public, the associate athletics director in charge of business affairs will probably provide you with a copy of the department's budget.

Yet no matter how much experience in finance you might have, you will not be able to definitely determine how much this intercollegiate athletics program costs the university whose name it bears. Nor will you be able to make rigorous comparisons between this athletics department and those of its rivals, let alone other big-time programs elsewhere in the country.

Organizations such as the National Collegiate Athletic Association (NCAA) and the Knight Commission, as well as many members of the press, have debated for years whether intercollegiate athletics departments make money. In 2003, an NCAA study noted that 85 of the then 117 institutions in Division I-A, the highest competitive level of intercollegiate athletics, reported a positive cash flow (Fulks, 2004). That study further notes that if one discounts the general-fund subventions, scholarship supplements, and



student fees transferred from the university to its athletics program, the number drops to 47. Few people believe that many athletics programs are financially stable. Myles Brand (2003), president of the NCAA from 2002–2009, often indicates that only a dozen or fewer athletics departments make money.

Why can't anyone say for certain? Athletics departments have revenues and expenses, and it should not be that hard to ascertain the differences between income and spending. Two answers exist. The first is practical: no trustworthy data set on revenues and expenses currently exist for intercollegiate athletics. This chapter examines the history and shortcomings of the available data collected over the past forty-five years.

The second answer explains the reason for the unavailability of such data. Colleges are nonprofit institutions. This statement is true intuitively and it is true legally, and according to Howard R. Bowen (1980), it is a powerful theory to account for colleges' actions. Colleges do not make decisions to maximize profit, as Bowen points out in *The Costs of Higher Education* (1980). Instead, they make decisions to maximize revenue collections and prestige. As a result, the revenue available for educational purposes determines costs in higher education.

Bowen's analysis covers colleges and universities, particularly in relation to state and private sources of funding. Although he does not consider it, his model offers an intriguing explanation for why most colleges spend much more than they make on intercollegiate athletics and why good data on the finances of college athletics are so difficult to collect.

Athletics departments on college campuses, particularly in Division I, are very interested in the approbation that stems from winning teams. They pursue success on the athletics field with the knowledge, consent, and support of the central university administration because they believe that the goodwill that stems from big games extends beyond the field and into the institution. The scholarly consensus, addressed comprehensively by Robert H. Frank in "Challenging the Myth: A Review of the Links Among College Athletic Success, Student Quality, and Donations" (2004), is that athletics success does not predict higher giving rates, increased numbers of applications, a better cohort of applicants, or any other measure of university success.

The myth dies hard, however, and colleges continue to invest heavily in athletics expecting returns not in the form of profit per se but rather in prestige. For example, Kennesaw State University in metropolitan Atlanta has begun the transition from Division II to Division I as part of a general effort to raise the university's profile to the point that it is considered to be in the same "league" as the University of Georgia or Georgia State University (Kennesaw State University, n.d.).

Athletics administrators raise all the money they can from game day revenue, broadcast royalties, postseason tournament distributions, and sources within the university, such as student fees or tuition waivers. Then they spend all the money they raise, primarily on coaching salaries, team

expenses, tuition and expenses for players, administrative expenses, and facilities. Since public institutions receive state funding and limited state oversight, athletics departments receive funds and limited oversight from their institutions. Thus, colleges and their sports programs share the consequences of ever-increasing expenditures (Bowen, 1980).

Because their goal is not to maximize profit, it could be argued that colleges have little need to measure the exact inputs and outputs of particular units or to benchmark those units against peer institutions. Furthermore, athletics departments may not benchmark themselves, citing the need for privacy, differences in organizational framework, or other concerns.

Very little work has been done on the fiscal operations of the roughly seventeen hundred institutions that compete in intercollegiate athletics, in other segments of the NCAA, or in other organizations, with the exception of some basic NCAA financial studies and work on the most selective private institutions in Division III (Bowen and Shulman, 2001). As a result, this chapter confines itself to the study of the "big time"—the colleges in NCAA Division I whose teams compete in front of crowds of thousands every week of the academic year.

I start by reviewing the early history of college sports and continue with an analysis of the most important studies of college sports finance. I then discuss changes in data requirements that came with federal gender equity laws and note more recent quantitative studies of intercollegiate sports finance. Finally, I conclude by offering some potential theoretical positions from which to study the economics and finance of college sports and their relationship to the rest of the university.

Athletics as an Independent University Function

Athletics programs at American colleges evolved out of student groups in the second half of the nineteenth century. Bernstein (2001), Sack and Staurowsky (1998), Sperber (1998), and Thelin (1994) all agree that varsity teams in forms recognizable today were organized parallel to student physical education programs as activities unrelated to the educational program.

Faculty members and journalists were often skeptical about the circus-like atmosphere surrounding such athletics events. As a result, in the early twentieth century, faculty and the press published a number of blistering critiques of the enterprise. The most notable of these came from Howard J. Savage and his colleagues at the Carnegie Foundation for the Advancement of Teaching, who in 1929 published *American College Athletics*, an extensive study of the "history, conduct, and values" of intercollegiate athletics. The grim report found, among other things, that strict organization and commercialization had removed the joy from the game (Savage, Bentley, McGovern, and Smiley, 1929).

Savage and his colleagues maintained that significant revenue enabled colleges to give players great luxuries, special coaching, and publicity agents. The salary of football coaches was seen as a particularly egregious

expense. A survey of ninety-six coaches found that the highest-paid salary was fourteen thousand dollars per year and the median salary was six thousand dollars. Both salary figures were higher than comparable figures for full professors and roughly equivalent to those of academic deans (Savage, Bentley, McGovern, and Smiley, 1929). In addition, Savage reported that alumni often schemed to pay players under the table for their services.

Mark F. Bernstein (2001) has offered one of the most thorough and intriguing analyses of the early finance of intercollegiate athletics. According to Bernstein, the abuses Savage and his colleagues found in 1929 were nearly forty years old. He further states that the University of Pennsylvania's student-run Athletic Association was \$6,600 in debt by 1894 and had to turn to the university's alumni to bail it out. By 1906, the Athletic Association at Penn had an administrative staff that reported to no one and a budget of \$141,000. In 1922, already in debt from a trip to the Rose Bowl, the university tore down Franklin Field and built a new fifty-four-thousand-seat stadium in its place. Four years later, the university added an upper deck. Penn financed the expansion and a new basketball arena with a bond issue that raised \$4 million (Bernstein, 2001).

Throughout the rest of the twentieth century, intercollegiate athletics grew in size and stature. Today it is a multibillion-dollar industry with more than a thousand colleges participating in NCAA sports. However, data on the operational needs and outcomes of athletics departments have been scarce and difficult to come by throughout most of the past century.

The Modern Scholarship on Intercollegiate Athletics Finance

In 1969, the NCAA commissioned its first in an ongoing series of reports on the finance of intercollegiate athletics, selecting the University of Missouri's accounting department to lead this project. Mitchell H. Raiborn, who left Missouri for Louisiana State University while completing the research, sent questionnaires to the 655 members of the NCAA and received only 277 responses, an overall response rate of 42 percent, making the entire project statistically dubious (Raiborn, 1970). The data covered the 1968–1969 academic year. Writing nearly a decade before the NCAA grouped its members into Divisions I, II, and III, Raiborn came up with his own five-category classification system for institutions, largely along the question of football competitiveness.

Raiborn's data have many limitations. The surveys were entirely voluntary and were forwarded anonymously to the author, meaning he had no way to verify the data or who submitted them. The reports required no internal validation from respondents—that is, financial officers of the institution did not have to certify that the data were accurate. Finally, the form of the survey gave no sense of whether colleges were using comparable accounting definitions. For example, athletics dining halls and residence hall operations

were defined by the report as a minor source of revenue for athletics departments. Yet during this era, campuses may have treated such operations in a variety of ways. Some colleges undoubtedly financed training tables and athletics dorms for athletes out of general funds. Some athletics departments may have been able to pay for these services themselves, using revenue generated from ticket sales and revenue. Or fans may have agreed to cover the costs themselves to curry favor with athletes and administrators.

Thus, from the very start, problematic data collection and analyses have obfuscated meaningful attempts to account for the revenues and expenses of intercollegiate athletics departments. Such problems mutated as sources of data changed over time, but they have not been mitigated.

With these caveats in mind, Raiborn's data present some interesting conclusions for what he termed "Class A institutions"—those that participated in football and other sports at the highest level. Revenues as reported increased by more than 100 percent for athletics departments over the course of the 1960s, buoyed largely by increases in ticket sales and game guarantees (in other words, fees paid to visiting teams) for football and basketball teams (Raiborn, 1970). Students provided about 12 percent of departmental revenues in student ticket sales and other assessments. However, Raiborn never discussed whether departments received any kind of direct subsidy from university general funds, even though 20 percent of institutions reported that athletics department deficits were financed by university funds.

The fastest-growing expenses, according to Raiborn's surveys, were scholarships and salaries. However, he noted that programs were expanding, with an average increase of sixty-two athletes per institution (for all respondents, not just Class A members), meaning that expenses might not have been rising on a per capita basis (Raiborn, 1970). Capital expenditures merit only a paragraph in the survey: the valuation of athletics plants grew from \$1.8 million in 1960 to \$3.5 million in 1969 and were largely financed from nonathletic sources (Raiborn, 1970).

Raiborn's studies were so limited as to be useless as tools for analyzing the finance of intercollegiate athletics, particularly as verification of his findings was impossible. But they set the stage for future research and do provide the earliest version of the basic taxonomy of intercollegiate athletics programs: rich, not so rich, and different gradations of poor.

The Numbers Do Not Tell the Whole Story

The American Council on Education's (ACE) analysis of college sports began with George Hanford's *An Inquiry into the Need for and Feasibility of a National Study of Intercollegiate Athletics* (1974). Hanford, then vice president of the College Entrance Examination Board, pointed out that football produced net revenue at only a few institutions and generated enormous deficits at others. Robert H. Atwell, who later became president of ACE, picked up on Hanford's (1974) and Raiborn's (1970) work through a series

of monographs, culminating in the 1980 publication of *The Money Game: Financing Intercollegiate Athletics* (coauthored with Grimes and Lopiano).

Atwell and his coauthors said that while the National Center for Education Statistics had brought some standardization in reporting financial data to higher education, no such efforts had been made in intercollegiate athletics. Interinstitutional comparisons were extraordinarily difficult because of the dearth of standardized data. It could be that athletics directors might have realized profits they did not want to disclose to college administrators or because they did not want to reveal the extent of their dependence on university funds and private gifts.

The authors describe "semiprofessional" departments, which are committed to being nationally competitive in one or more sports and in spending. Debt service for capital improvements made up 10 to 12 percent of operating budgets, and the highest expenses were salaries and wages (25 to 30 percent), scholarships (18 to 20 percent), and recruiting and travel (12 to 15 percent) (Atwell, Grimes, and Lopiano, 1980). On the revenue side, gate receipts provided 50 percent of departmental income, with television and bowl receipts adding 10 to 15 percent. Student fees accounted for 10 percent of program revenue at institutions with football programs and 20 percent at those without football (Atwell, Grimes, and Lopiano,1980).

Atwell, Grimes, and Lopiano asserted that little, if any, institutional support goes into operating budgets for athletics at the universities they designate as semiprofessional. A few institutions supported salaries or scholarships, or both, out of general funds, but at most colleges, institutional support consisted of providing the physical plant and utilities for athletics departments.

This volume was one of the first articulations of some commonly accepted truths about college sports: only a few teams generate profits in excess of expenses, institutions support "semiprofessional" programs by providing facilities and utilities free of charge, and national organizations exercise more control over intercollegiate athletics than colleges themselves do. However, its data set was so small that it did not provide a very comprehensive grasp of how colleges spent money on athletics. That did not change until the 1990s.

Title IX and Reporting Requirements

Bowen (1980) had indicated that colleges make decisions not to maximize profit but to maximize revenues and prestige, thus making the revenue available for educational purposes determine the costs in higher education. This tendency is demonstrated in colleges' expansion of their sports offerings. But such expansions, as well as associated increases in costs, also have occurred because of the need to comply with Title IX of the Education Amendments of 1972, which bans sex discrimination at institutions receiving federal funds (Suggs, 2005). Nearly two decades later, Title IX became the impetus for a new set of data reporting requirements for athletics programs.

In 1994, Congress passed the Equity in Athletics Disclosure Act (EADA), which required colleges to publish summary versions of the data they had been providing to the NCAA for Raiborn's reports, which were published every two years beginning in 1970. Specifically, colleges had to report the number of students on each men's and women's team, the amount of money spent on athletics scholarships for male and female student athletes, the numbers of male and female coaches for men's and women's teams, and the total revenues and expenses (including an itemization that outlines the revenues and expenses from football, men's basketball, women's basketball, all other men's sports combined, and all other women's sports combined) derived from the institution's intercollegiate athletics activities.

The EADA required colleges to begin publishing reports on this information following the 1995–1996 academic year. The NCAA devised a form consisting of a number of worksheets and ten tables and required members to submit them annually. These reports then became the basis of the association's biennial reports on the revenues and expenses of intercollegiate athletics, which Daniel L. Fulks took over from Raiborn in 1995. Fulks's EADA data allowed him to adjust figures to remove institutional support, that is, direct transfer of institutional funds to athletics programs, including student fees (except for student ticket sales). He does not restate average revenues but shows that most Division I-A athletics departments depend heavily on funding from their institutions. Exempting institutional funding, Fulks (2004) finds that intercollegiate athletics can balance the books at fewer than fifty institutions in Division I-A.

Beyond strictly profits and losses, Fulks's (2004) definitions of revenue and expense line items are sufficiently different to prevent direct comparisons with Raiborn's data. On average, ticket sales account for 27 percent of departmental revenue; donations account for 9 percent; institutional support for 10 percent; and postseason revenue from the NCAA, bowl games, and other sources for 14 percent. This reflects the new revenue available to institutions from the NCAA's contracts to broadcast the Division I men's basketball tournament as well as television broadcast deals made by conferences to show football and basketball games (Fulks, 2004). Salaries for both coaches and administrators account for nearly a third of departmental expenses. Scholarships represent 18 percent, while equipment and supplies are now only 4 percent.

Fulks has access to both the worksheets and tables that colleges send to the NCAA, but only the ten tables, which contain summary data, are made public under the EADA. Using newly available database technology, newspapers began collecting data aggressively, with the *Chronicle of Higher Education, Kansas City Star, New York Times, USA Today*, and *Washington Post* publishing reports on college athletics as the data became available. (The reports are available from the U.S. Department of Education at http://ope.ed.gov/athletics.)

Researchers, however, should be very careful about using this as a trusted resource. The problems that Atwell, Grimes, and Lopiano (1980) identified are as true of EADA-based data as they were in Raiborn's time. Outside analysts have no way of verifying any of the information contained in the reports submitted by colleges to the NCAA, the U.S. Department of Education, and media outlets. Different institutions have a variety of accounting requirements, rendering comparisons among institutions problematic at best.

Partly for this reason, only recently have economists begun to turn their attention to rigorous analysis of intercollegiate athletics financial data.

Bowen and Shulman in The Game of Life

Possibly the most controversial study of intercollegiate athletics in the past decade has been *The Game of Life: College Sports and Educational Values* (2001) by William G. Bowen and James L. Shulman. Bowen and Shulman, who were president and chief financial officer, respectively, of the Andrew W. Mellon Foundation at the time of publication, found that athletes at selective colleges tended to have poorer academic credentials than other students, tended to cluster in the social sciences, and held fewer community leadership positions following graduation.

The findings on academics have been hotly disputed even years after the book was published, but Bowen's (a president emeritus of Princeton and an economist by training) and Shulman's chapter on expenditures and revenues has received virtually no attention. Their findings are necessarily limited, especially regarding big-time college sports, because their analysis covered only twenty-two institutions. These included only eight in Division I-A: Duke University, University of Michigan, Northwestern University, Pennsylvania State University, University of Notre Dame, Stanford University, Tulane University, and Vanderbilt. All were chosen not because of their sports prestige but because of the selectivity of their admissions processes (Bowen and Shulman, 2001).

As earlier analysts have found, Bowen and Shulman note the high cost of athletics scholarships and employee salaries, particularly those of coaches. However, they make an attempt to separate teams' operating costs from infrastructure costs (administration, marketing, physical plant, and so forth). The top Division I-A colleges in their sample—Michigan, Notre Dame, Penn State, and Stanford—spent \$16 million annually on infrastructure costs on average, or 44 percent on average, of their intercollegiate athletics budgets (Bowen and Shulman, 2001).

The authors discussed the weaknesses of EADA data and then opted instead for a case study approach, looking at Michigan and Duke, among other institutions. In 1997–1998, Michigan earned \$30 million and Duke \$10 million in athletics-related revenue. Most of these funds came from gate receipts, sponsorship in licensing fees, fundraising, television, and post-

season revenue, thanks to both institutions' avid fan bases and winning teams in football (Michigan) and basketball (Duke).

The question of overhead and capital costs is the most important and most elusive part of the equation, the authors argue. A portion of the president's salary, the admission's office's time, and similar fractions of other campus operations should be figured in any sort of overall reckoning of the cost of intercollegiate athletics on a campus, they said. As for capital costs, the athletics physical plant at Princeton has been valued at \$200 million; they reckon that the comparable figure at Duke or Northwestern would be double that and assume that "the University of Michigan, with its huge athletic complex, lives in a capital cost stratosphere of its own" (Bowen and Shulman, 2001, p. 250). This was the first iteration of the Mellon study.

Is There an Arms Race in College Sports?

Following the publication of *The Game of Life*, the Mellon Foundation and the NCAA jointly funded two studies of intercollegiate athletics by Sebago Associates, a firm consisting of Robert E. Litan, Jonathan N. Orszag, and Peter R. Orszag (2003; Orszag and Orszag, 2005). The reports applied much more sophisticated economic techniques to EADA reports and other sources of data than had been done before, finding that athletics expenditures in Division I-A are a relatively small share of overall academic spending. At the same time, the report showed that Division I-A football and basketball markets exhibit increasing levels of inequality, as well as some degree of mobility in expenditure, revenue, and winning percentages—colleges move somewhat freely among quartiles in these areas over time.

A second report, issued in 2005, suggested that there might be a subtle arms race in football capital spending in Division I-A, given that the expansion of a stadium within a conference appears to make it more likely that other schools within the conference will expand the capacity of their stadiums (Orszag and Orszag, 2005).

While the study by Orszag and Orszag (2005) applied more of an econometric approach, as opposed to the accounting approach favored by Raiborn, Fulks, and Bowen and Shulman, their data limitations made it impossible to conclude whether spending on college sports was a drain on institutional finances or whether universities were engaged in an "arms race" to improve facilities. EADA data suggest that athletics department operating budgets are indeed a small portion of university operating funds, but as Bowen and Shulman (2001) point out, such analyses neglect both the capital costs of sports programs and the real costs that should be attributed to athletics programs, such as the time of administrators outside athletics departments. Even Orszag and Orszag's attempts to discuss the "arms race" fell short because it included only capacity changes at college stadiums, not the multimillion-dollar expansions of academic facilities, training complexes,

and elaborate coaches' offices emerging across the country. Jonathan Orszag has added additional studies to the NCAA's libraries but has not been able to get past this challenge.

Other Discussions

Little progress has been made in the understanding of intercollegiate athletics finance. Ticket receipts, television royalties, postseason distributions, game guarantees, and institutional transfers remain the main source of income for intercollegiate athletics, although the last is highly difficult to assess without overall university budgets to study. An athletics department's key challenge is to ascertain its best chances of maximizing each source of revenue, which will vary based on a number of factors, including teams' competitive records, conference affiliations, and the market power of athletics departments. A research team led by John V. Lombardi, chancellor of the University of Massachusetts at Amherst, noted that this has significant ramifications for the opportunity cost generated by athletics programs (Lombardi and others, 2003). An institution with an annual budget of \$700 million that must subsidize an athletics program with \$8 million in general fund subventions has an opportunity cost equal to 1.14 percent of its budget.

A new contribution to the literature is an edited volume by John Fizel and Rodney Fort: *The Economics of College Sports* (2004). Its authors examine the topic from a variety of angles, including perspectives on the NCAA and the political market it has created, marginal revenue production for athletes, and competitive balance within college sports. On the question of institution-level finance, Brian Goff (2004) notes that departments value athletics scholarships at their "list price" rather than the actual marginal cost of housing and educating each athlete, and athletically produced revenues, notably merchandise sales, are often credited to general funds or nonathletics units. Goff goes on to suggest that making such adjustments indicates that most institutions actually do make money: of 109 Division I-A institutions, he estimates that the median profit on athletics operations among big-time institutions is \$3.9 million, and 26 percent of universities turn a profit of \$7.1 million or more.

Conclusions and Recommendations for Further Research

It is a common truism that the economic landscape of college athletics has been completely redrawn in the past few decades. The rivers of revenue have shifted somewhat in their courses, with television and postseason revenue, along with ticket revenue, coming to dominate the decisions made by directors of major athletics programs. However, the basic structure and motivations of athletics departments have not changed in more than a century. It can be argued that, similar to what Bowen proffered with respect to

the motivations for costs escalations in higher education, even athletics departments spend money not to make profits but to put the best teams on the field in a way of reflecting greater glory on their own institutions.

Even after plugging away for three decades, economists still have no way of saying how much sports truly cost their institutions, much less what their opportunity costs might be. There is a clear need for better data, which may possibly come from a new reporting system implemented by the NCAA and the National Association of College and University Business Officers (NACUBO) in 2008. Greater uniformity in accounting procedures for intercollegiate athletics revenues and expenses could also create a useful data set for researchers to provide more accurate conclusions about intercollegiate athletics.

Moreover, what is needed is a better application of the principles of economics and finance in higher education. Bowen's revenue theory of cost applies directly to the behavior of athletics departments, which spend money on capital and operational strategies to win games and recruit better athletes. This is a form of prestige maximization rather similar to the one practiced by colleges and universities, whose faculties and administrators would like to attract research grants and better students.

One potential theory to organize future research is resource dependency theory. The basic notion, as laid out by Pfeffer and Salancik (1978), is that an organization's vulnerability to external influence is partly determined by the extent of its dependency on resources provided by outside entities. There are two measures of dependence: the magnitude of the exchange and the criticality of the resource. The overriding long-term organizational goal is autonomy or independence; removing dependence on resource providers ensures continuing stability and equilibrium.

The actions of organizations, and particularly universities, can be understood only by reference to external resource providers. As universities look outward to students, donors, corporations, governments, and other grant makers for funds, this point takes on enormous importance.

The same trend has come about in athletics, in which departmental personnel have come to rely on donors and broadcasting corporations for operating funds. Such organizations thus have some control over departmental operations, most notably in the scheduling of basketball and football games. When ESPN or other broadcast entities demand that games be played on weeknights or late at night without regard for student schedules, observers worry about the influence of commercial entities on college life.

"Nearly a third of our conference revenue comes from broadcast royalties, and nobody is immune to the pressures of the marketplace," said Michael F. Adams, president of the University of Georgia, in a story in the *NCAA News* (Johnson, 2005). "As you know, schedules in baseball, basketball and softball are even more disruptive not only to campus life, but also to the academic life of the student-athletes involved."

In the view of some observers, including Bok (2003) and Slaughter and Rhoades (2004), athletics represents the leading edge of the growing controversy over commercial intrusions on college campuses. Armed with what we hope will be trustworthy new data, scholars will have the opportunity to assess the athletics enterprise for its role and influence on campus life and present new policies to help university officials deal with a seemingly interminable problem.

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