The National Collegiate Athletic Association Cartel:

Why it Exists, How it Works, and What It Does

by

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The Party seeks power entirely for its own sake. We are not interested in the good of others; we are interested solely in power, pure power.

George Orwell, 1984

Introduction

This essay describes the National Collegiate Athletic Association's (NCAA) economic cartel: why it exists, how it works, what it does, the effects it has on its host institutions, and its likely future. But first, we ask why it is worthwhile to rehash yet again the cartel activities of the NCAA (Koch, 1973; Fleisher et al., 1992).

The answer is simple--power and money. Really big money,² arising principally from television broadcast rights that have soared since the 1984 landmark U.S. Supreme Court decision (*Board of Regents of the University of Oklahoma* vs. NCAA) that stipulated that big-time commercialized intercollegiate athletic competition is subject to the 1890 Sherman Antitrust Act.³ The irony of this explosion of broadcast riches pouring mostly into about a hundred university athletic departments and NCAA headquarters in Indianapolis is that the 1984 Court

¹ University of Chicago, and Vanderbilt University and the University of Adelaide, respectively. The authors acknowledge and thank their research assistant, Lindsey Currier, for her valuable contributions and comments.

² In nominal dollars, the median intercollegiate athletics program among the 128 largest (defined later as Division I, Football Bowl Subdivision) generated \$48 million in 2015, 110 percent more than the median of \$23 million in 2004 (Fulks, 2016, Table 2.1). Aggregate revenue for college football teams at 2,072 institutions rose from \$1.89 billion in 2003 to \$4.66 billion in 2014; for basketball it rose from \$1.13 billion in 2003 to \$2.68 billion in 2014 (Equity in Athletics Data Analysis, U.S. Department of Education, 2017, accessed January 22, 2017, https://ope.ed.gov/athletics/Trend/public/#/answer/6/601/trend/-1/-1/-1).

³ Consistent NCAA revenue and expense data are available only since 2004. The share of NCAA Division I FBS institutions (defined later) total intercollegiate athletics revenues (including within university transfers) accounted for by NCAA and conference distributions (mostly broadcast rights fees) and direct broadcast revenues increased from 14 percent in 2006 to 23 percent in 2015 (Fulks, 2008, Table 3.27; Fulks, 2016, Table 3.14).

decision ended an agreement among America's colleges that had restricted the supply of college football games available for broadcast, pushing the price of broadcast rights to a level above the competitive price. One would have expected the end of that arrangement to reduce prices, which did occur immediately after the decision (Siegfried and Burba, 2004). But it quickly reversed. The short-lived decline in broadcast revenues to about one-third the 1983 level was followed by three decades during which broadcast revenues left the initial post-1984 dip in their dust (Carroll and Humphreys, 2016). Several things caused this explosion in revenue, some orchestrated by the NCAA and its member institutions, some a result of evolving demographics, and others emanating from rapidly changing broadcast technology.⁴

Although many people predicted that broadcast rights would decline sharply toward the marginal costs of airing college football games (about a quarter million dollars at the time) (Siegfried and Burba, 2004) after 1984, they failed to appreciate the rapid growth of television networks demanding game content, and the degree to which college football demand is regional, preserving market power for conferences. Prior to 1984, ABC, which held the rights to televise Saturday intercollegiate football, had been airing simultaneous regional contests. The greater appeal of SEC games in Dixie and Big Ten matchups in the rust belt must have been enough to boost advertising receipts by more than the extra cost of airing multiple games.

Interest in college sports, especially football, is regional in part because many alumni of colleges and universities reside relatively close to their alma maters,⁵ and they and the current

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⁴ For a more detailed examination of broadcasting and how it has impacted professional sports leagues, the NCAA, and individual universities see the authors' complementary essay: "The Role of Television Broadcasting in National Collegiate Athletic Association Sports". By 2015, broadcast rights constituted about 23 percent of the revenue received for intercollegiate sports by the largest 128 college sports programs. Ticket sales were 19 percent of revenues, cash contributions were 20 percent, and institutional subsidies were 18 percent (Fulks, 2016, Table 3.14).

⁵ Between 71 (New England) and 88 (Pacific) percent of recent college graduates live in the same region as the college they graduated from (based on nine U.S. geographic regions) one year after graduation (Sasser, 2008)

students constitute a substantial base demand for television broadcasts, as well as for live attendance. The largest conferences (called "power conferences")⁶ quickly began to expand in order to solidify their regional dominance. Starting with the Big Ten adding Penn State in 1990 all five dominant conferences added teams during the 1990s and 2000s.

The 1984 Court decision dissolved the NCAA's single football television contract. After a brief period of confusion during which home and visiting teams for some games each sold "exclusive" rights to the same game to different broadcasters, a duopoly emerged. The College Football Association (CFA), formerly an internal NCAA lobbying group, negotiated television rights for teams in the SEC, ACC (Atlantic Coast Conference), and Big Eight (which has since evolved into the Big-12), plus Notre Dame and Penn State, two successful independents at the time. The Big-Ten and Pac-10 joined to offer networks an alternative television package. This duopoly was not challenged by antitrust authorities, but eventually proved to be unstable. The CFA dissolved in 1995 amidst internal wrangling over increasingly lucrative revenue shares (Siegfried and Burba, 2004). The Big-Ten and Pac-10 separated in 1990, for similar reasons.

Since 1995 each of the five power conferences has negotiated television broadcast rights on behalf of its members. They have been able to parlay the regionally parochial sports interests of their fans and the growing number of broadcast networks seeking game content (e.g., Fox and ESPN) relative to the number of conferences offering games into an ever growing financial bonanza. As a result, by 2015 teams in the power conferences were earning \$20 to \$35 million annually from television broadcast rights (Alsher, 2017).

The powerful intercollegiate athletics programs have taken other steps to diminish what semblance of economic competition may have existed a few decades ago. In 2007 the NCAA

⁶ The five power conferences are The Atlantic Coast Conference (ACC), The Southeastern Conference (SEC), The Big-Ten Conference (Big-Ten), the Big-12 Conference (Big-12), and the Pac-12 conference (Pac-12).

purchased the National Invitation Tournament (NIT) to end its modest threat to the NCAA's lucrative "March Madness" basketball tournament. The NAIA (National Association of Intercollegiate Athletics, which governs about 250 tiny athletics programs) has been marginalized, and women's basketball has been brought under control of the NCAA. Because many big-time university sports teams play in locations where there is limited competition for live gate attendance and their devoted fans exhibit relatively inelastic demands, the teams can exercise monopoly pricing and implement price discrimination to maximize gate receipts too.

While the power conferences solidified their market power, technological developments have increased the relative value of televising events that viewers prefer to watch live—
"breaking" news and live sporting events. Because both watching an event live and recording it to view later after skipping the commercials are almost mutually exclusive, viewers cannot easily avoid the commercials in live sports broadcasts. This increases the relative value of advertising on live events, allowing price increases and further bolstering broadcast revenues.

The consequence of these changes has been to create a college commercial sports enterprise that now measures aggregate revenues in the billions and compensates head coaches and some athletic directors in the millions. Gross revenues of intercollegiate athletics programs have grown to such gargantuan proportions that an enterprise that was once largely a peripheral activity on college campuses no longer goes unnoticed. Reporters, columnists, faculty, and the student-athletes themselves have begun to question the distribution of the largesse. Protests have been lodged about the unfairness of coaches and athletic administrators receiving salaries far in

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⁷ The Association for Intercollegiate Athletics for Women (AIAW) governed women's college and university sports from 1971 through 1982, after which the NCAA organized women's championship tournaments in most sports, and the AIAW discontinued operations.

⁸ USA Today reported on October 26, 2016, that 36 college head football coaches earned over \$3 million each in 2016. The median head coach in the SEC earned \$4.1 million. The highest salary nationally for 2016 was earned by Jim Harbaugh at Michigan, \$9 million, followed, in order by Nick Saban (Alabama) \$6.9 million, Urban Meyer (Ohio State) \$6.0 million, Bob Stoops (Oklahoma) \$5.5 million and Jimbo Fisher (Florida State) \$5.2 million.

excess of what they could earn in their next best employment opportunities that are at least partially earned on the backs of players, many of whose families are economically challenged. Players have attempted to unionize in order to bargain for more compensation and better health insurance coverage. Others have questioned the absence of challenges to the cartel agreement that limits player compensation (Sanderson and Siegfried, 2015) and allows conferences to sell broadcast rights collectively. And recently, a series of legal actions has been lodged against the NCAA's continued operation as if it were exempt from the nation's antitrust laws.

The next sections briefly review the history and evolution of the NCAA, and describe the theoretical and empirical underpinnings of the NCAA's economic cartel.

Why do Colleges and Universities Participate in Commercialized Intercollegiate Sports?

One of the truly unique aspects of American "exceptionalism" is the operation of bigtime commercialized sports by colleges and universities. How so many of the world's leading research and teaching institutions came to host commercialized sports programs that generate over \$15 billion annually – almost equal to the combined annual revenues of the National Football League and National Basketball Association – is an interesting tale, especially because there is no evidence that intercollegiate athletics helps to create and disseminate knowledge.

This is especially curious because providing entertainment for sale is not an institutional purpose in the charter of any of the universities that collect substantial revenues from intercollegiate sports. When Clotfelter (2011) had a research assistant examine the websites of 52 large universities, the assistant found only four that even mentioned athletic programs in their public mission statement. And while about 400 do operate commercial intercollegiate athletics programs, the vast majority of colleges do not. The presence of big-time athletics is even more

surprising in light of the loose governance connection between them and their host institutions that may expose their hosts to substantial risk to their academic reputations (e.g. Southern Methodist, the University of North Carolina-Chapel Hill, Baylor, Penn State, among others).

Moreover, only a score of the colleges with big-time athletics programs reap net financial gains from them. If this occurred in manufacturing, there would surely be steady exit. Yet 63 of the leading 100 college football programs from 1920 were still among the largest 100 sports programs in 2010. Of the 1920 leaders, 28 are liberal arts colleges, all but four of which continue to field football programs absent scholarships; eight are in the Ivy League, which does not have athletic scholarships. Only two major universities have dropped big-time football over the past century – Washington University and the University of Chicago (Clotfelter, 2011, pp. 49-50). Before we dismiss the big-time sports programs of our leading universities as a colossal mistake, we need ask why they have persisted so long while operating mostly in the red.⁹

Clotfelter (2011, p. 15) identified four roles for intercollegiate athletics on college campuses: (1) a consumer good that students and alumni value, assisting with student recruiting; (2) a business enterprise that serves as an entrepreneurial outlet; (3) an instrument for universities to build support from constituencies; and (4) an educational role, as intercollegiate sports may promote courage, effort, fortitude, discipline, teamwork, and foster grace in winning and losing.

Most Americans expect that intercollegiate athletics raises money for their host institutions. ¹⁰ NCAA data, however, reveal that in spite of a lucrative gross revenue stream, only 24 of the 128 top-level (Football Bowl Subdivision) universities earned an operating

⁹ This and the succeeding eight paragraphs are taken from Sanderson and Siegfried, 2015, updated and revised, and used by permission of the American Economic Association.

¹⁰ Based on a Knight Commission (2006) survey, 78 percent of Americans believe intercollegiate athletics is profitable.

surplus on intercollegiate athletics in 2015 (Fulks, 2016), a typical year, and only a portion of those profits were transferred to the academic side of their universities.

Texas-Austin is an example of a university where athletics is profitable. In 2013, it earned a net of about \$20 million on gross sports revenues of \$163 million (Kirk 2014). But, at most universities funds flow in the opposite direction. In 2013 USA Today reported that over \$1 billion of student tuition moved annually to athletics departments in support of intercollegiate sports (Berkowitz et al., 2013). Rutgers, for example, subsidized intercollegiate athletics to the tune of \$27 million in 2010, while it froze compensation over the rest of the university to save \$30 million after the global financial crisis. By 2013, Rutgers' annual subsidy had grown to \$47 million (Sargeant and Berkowitz, 2014), about \$1,400 for each Rutgers undergraduate, sports fan or not. Overall, the fraction of athletics revenues coming from the non-athletics part of universities in 2013 was 20 percent at the 128 top football playing universities, 71 percent at the next 120 largest football playing universities, and a whopping 77 percent at big-time sports universities that do not play football. 11 The amounts redirected from academic to athletic purposes at all but two dozen of the colleges and universities playing big-time commercialized sports are remarkable at a time of legislative cutbacks in state support for public universities and incessant complaints about rising tuition that students and their families are asked to pay.

How have over 100 of the top 128 athletics departments persuaded their university presidents and trustees to continue devoting scarce general funding to intercollegiate sports?

When they incur financial losses on athletics, universities seem to double down, spending even

¹¹ These fractions, and all other NCAA data reported here are limited to intercollegiate athletics programs, excluding intramural and club sports. The 128 FBS universities (defined later) have the largest intercollegiate athletics budgets; the 120 FCS universities (also defined later) have the second largest budgets.

more on salaries for coaches and improving physical facilities, rather than viewing losses as a signal to redeploy assets and efforts. Several possibilities could explain this surprising behavior.

First, intercollegiate athletics might attract greater appropriations from state legislators concerned about their constituents' perceptions of the public universities in their states, especially in view of the fact that the median voter in almost every state is *not* a college graduate, ¹² and might be more interested in the flagship state university's football or basketball team than its library or faculty research. Humphreys (2006) found that among 570 public universities, those with big-time football receive about eight percent more taxpayer funding than comparable universities without football; participation seems to matter more than success on the field. Alexander and Kern (2010) found that intercollegiate basketball has a similar effect.

Second, intercollegiate athletics may boost private donations. A dozen or so studies have explored the effects of big-time intercollegiate athletics on contributions to colleges: some find no effect, while others report a modest positive gain (see Getz and Siegfried, 2012 for much more detail). Playing in football bowl games appears to stimulate the most contributions.

Because most of the incremental donations are steered to athletic departments (Anderson, 2012), however, it is not clear whether this effect produces much benefit to universities in general.

Third, high-profile sports programs, like other campus amenities, may attract more applicants and thus additional enrollment, which is especially beneficial if fixed-cost facilities (e.g. dormitories) are underutilized. Some anecdotes suggest winning is linked to applications. In 1983 North Carolina State experienced a 40 percent rise in undergraduate applications after winning the NCAA men's basketball championship under charismatic coach Jim Valvano.

¹² In some states, e.g. West Virginia, Louisiana, and Arkansas, the median voter has not even *attended* college (Gaguin and Ryan, 2014, p. 194, and U.S. Census Bureau. "American FactFinder - Results". *factfinder.census.gov*. Retrieved 2017-01-23.

Boston College enjoyed a similar application surge after Doug Flutie's famous "Hail Mary" pass won a nationally televised football game against the then-dominant University of Miami in 1984. A recent systematic study (Pope and Pope, 2009) confirms that participating in post-season games generates student interest in a university, but the gains are modest and fleeting.

Evidence indicates that simply having a big-time sports program matters more for student recruitment than does the success of the teams, and football seems to matter more than basketball, perhaps because it is played during the college application season. Additional spending on intercollegiate athletics may alter the mix of institutions to which high school seniors apply and which one they attend, but there is no evidence that intercollegiate athletics increases overall college enrollments—beyond the important but small effect of increasing the chances of some of the athletes themselves attending college (Getz and Siegfried, 2012, p. 359).

Fourth, spending on sports programs resembles an arms race (Frank, 2004; Hoffer et al., 2014). Successful athletic programs bid aggressively for high-profile coaches and perpetually improve their physical facilities to lure recruits. Small differences in spending can yield large advantages in recruiting and, subsequently in winning. Unprofitable programs have little choice but to ratchet up spending, or they may fall even farther behind in the competition for players and coaches, with devastating effects on their revenues. Thus, the net positive revenues of a few dozen teams steadily drive up costs for all competitive teams, with the result that revenues are static because the investments by all teams cancel each other, requiring universities with already unprofitable intercollegiate athletics programs to increase further internal subsidies. ¹³

Even if participation in intercollegiate sports affects state appropriations, stimulates private donations, and/or boosts student applications, that is insufficient by itself to justify

¹³ While median revenue generated from intercollegiate sports increased by 110 percent from 2004 through 2015 at the 128 largest programs, expenses rose by 129 percent at the same programs (Fulks, 2016, Table 2.1).

subsidizing intercollegiate athletics. For example, if the purpose of investing in intercollegiate athletics is to increase contributions, one would need to demonstrate that spending an incremental \$1 million on the salary for a coach generates more than \$1 million in additional donations, and, further, that it stimulates more donations than would spending that money on traditional university fund-raising efforts for other worthwhile endeavors. The same argument applies to intercollegiate athletics as a means of attracting state funding and student applications.

Fifth, many colleges and universities set tuition well below the level sufficient to cover operating expenses. They selectively admit students with specific talents and characteristics (including financially successful parents), and hope that some of them mature into appreciative multi-millionaires willing to share their good fortune with their alma maters (Hoxby, 2014). To enhance the prospects that the more successful graduates remember them during estate planning, the institutions invest in creating and maintaining emotional ties. They organize alumni cruises, send faculty to talk to local alumni clubs, and sponsor "homecoming" events that often feature a football game. The challenge to the presidents of the universities is to weigh on the margin the value of funds devoted to directly and immediately improving teaching and research against the prospective value of a more visible and successful intercollegiate athletics program that might eventually attract sufficiently larger donations to the non-athletic side of the institution in the future, such that when discounted, generate an even greater boost to teaching and research. Of course, a number of prominent institutions have successfully pursued ties with their alumni without big-time commercialized sports: e.g., California Institute of Technology, Johns Hopkins, New York University, and Washington University (St. Louis), as well as the entire Ivy League.

Finally, football especially may affect *academic* status in higher education. Through its role in grouping colleges into conferences, football can affect how the public perceives particular

institutions within higher education. An institution's sports rivals publicly specify its peers as worthy adversaries, perhaps academically as well as athletically; peer academic assessment scores vary considerably more among than within football conferences (Lifschitz et al., 2014).

A Short History of College Sports

By 1860, there were about 200 mostly small, private, religiously affiliated colleges and universities in the United States. The number grew dramatically after the Morrill Acts (1862 and 1890) created the federal land-grant system that spawned large state universities, which today field most of the big-time intercollegiate football and basketball programs. As colleges and universities grew rapidly in both number and size during the last third of the nineteenth century, competition for students intensified. Sports programs were a means to attract more students.

Rowing was the first sporting contest between students at different colleges; Harvard met Yale on Lake Winnipesaukee in 1852. In 1859 Amherst met Williams in the first intercollegiate baseball game. The first intercollegiate basketball game using the now familiar five players on each team was played in 1896, when the University of Chicago defeated the University of Iowa.

The development of intercollegiate football is more complicated. The rules changed over time, morphing it from a game akin to soccer into one similar to rugby, and eventually into what is now American football. The first intercollegiate game was played in 1869 between Princeton and Rutgers. Important rules changes occurred in the 1880s, when the rugby scrum was replaced by a snap from scrimmage, teams were given three tries to gain at least five yards, and blocking was allowed. To facilitate the determination of a first down, lines were drawn on the field at five- yard intervals, as is the practice today (though the first down yardage has doubled).

Violence in the game intensified in 1888, when tackling below the waist was legalized, leading to a tactic in which blockers interlocked arms and ran together into defenders. A version of this tactic was called the Flying Wedge because the players gave themselves a running head start before the ball was snapped. Interest in football increased steadily, so by the 1890s gate receipts had risen to serious levels. Harvard built the first permanent college football stadium in 1903, with a capacity of 31,000 fans. Many other universities followed. Once fixed costs were invested, steady revenues became indispensable to pay the mortgage. Chicago was the first university to pay its football coach, when it lured Amos Alonzo Stagg from Springfield College in 1892. By 1905 Harvard's football coach earned about the same as its President. Today head football coaches at big-time programs routinely earn more than anyone else on campus.

Development of the National Collegiate Athletic Association ¹⁴

From 1890 through 1905, over 300 college and university students died as a result of injuries sustained playing intercollegiate football (Zimbalist, 1999, p. 8). News reports about collegiate football deaths and injuries threatened to undermine its continued popularity. This prompted Theodore Roosevelt to summon to the White House representatives from then football powerhouses Harvard, Yale, and Princeton. The President extracted from them a promise to change the rules to reduce the violence emanating from the game.

Further impetus for reform arose from the death of a Union College player in 1905, who died after being hit by the New York University offensive line. NYU's chancellor witnessed the event and resolved to end the violence. He gathered delegates from 62 colleges to consider reform; they formed the Intercollegiate Athletic Association of the United States (IAAUS) and

 14 A more comprehensive history of the development of the NCAA is in Grant, Leadley and Zygmont, 2008 .

appointed a rules committee, which introduced a rule requiring at least six offensive players to be on the line of scrimmage at the snap of the ball, thereby ending the Flying Wedge.

A formal organization with rulemaking authority was necessary to reduce the mayhem in football because violence led to victories, and winning attracted fan interest, attendance, and gate receipts. Individual teams in such a prisoners' dilemma game confronted a dominant strategy of continuing the violence if allowed to do so. No team would unilaterally refrain from dangerous practices because that would lead to the worst possible outcome, even though continued violence seemed likely to reduce overall demand for intercollegiate football. Teams would agree to abandon dangerous practices only with assurance that their opponents would follow suit. From its very beginning, collegiate football's self-regulatory organization was concerned with the economics of the sport via a fundamental application of a game theoretic dominant equilibrium.

In 1906, 39 colleges and universities ratified the IAAUS constitution. It prohibited payments to students based on athletic skills, banned player recruitment, limited player eligibility to four years, and excluded former professional players. In 1910, the organization changed its name to the National Collegiate Athletic Association (NCAA); by1911 it had 95 members and had become entrenched as the self-regulatory body overseeing collegiate athletics.

While the first set of IAAUS bylaws specified that students not be paid for their playing services, it expressed no concern as to whether coaches or universities profited from sport. In 1922, the NCAA banned payments (including scholarships) to students for participating in sports, but a relaxation of the rules in 1935 instituted athletic-related scholarships for players.

The next significant changes in NCAA rules occurred in the aftermath of World War II.

To better control costs, which were at risk of consuming the growing revenues collected by universities from their athletic enterprise, the NCAA adopted a "sanity code," forbidding any

compensation to players.¹⁵ This reinstated the ban on athletic scholarships. However, by 1951 athletic scholarships returned to stay. While player compensation has been restricted to a grant-in-aid since 1951, player costs were not really under control until 1973, when limitations on the number of scholarships (but not the number of players on a team) were instituted. Football was initially restricted to 105, which was lowered to 95 in 1978 and, in 1992, reduced to the 85 allowed today. To ease student-athletes', adjustment to college, first-year students were ineligible to play in NCAA championships from 1939 through 1968. As a cost-cutting measure, in 1968 they became eligible to participate in all sports except football and basketball. Four years later football and basketball also allowed first-year students to play, further reducing costs.

In 1973 the NCAA divided into Divisions I, II, and III. Division I includes large universities competing at the highest level in most sports; Division II institutions are usually smaller, compete at an intermediate level, and offer limited scholarships; Division III offers no athletic scholarships. In 1978 Division I was further split into three groups for governing football, Football Bowl Subdivision (FBS) for (now) 128 teams competing at the highest level, Football Championship Division (FCS) for about 120 teams competing at a lower level, and about 100 teams that field competitive basketball teams, but do not play football. Division I is not subdivided for the governance of sports other than football. In addition to the approximately 350 Division I teams, there are about 300 currently in Division II and 450 in Division III.

The NCAA has regulated college sports since its inception, but its interest in economic matters intensified after World War II.¹⁷ The shift from player safety to efforts to first control

¹⁵ The concept was that it was "insane" to pay players, when their services could be acquired free.

¹⁶ Walter Byers began the practice of calling the players "student-athletes" in 1951, when he became Executive Director of the NCAA, in order to justify their continued unpaid amateur status. (Byers, 1995).

¹⁷ The NCAA's constitution declares its basic purpose to be to "maintain intercollegiate athletics as an integral part of the educational program" of colleges (NCAA Constitution, Article 1.3.1), which is sufficiently vague as to reveal

costs and subsequently to expand revenues occurred after football playing rules were stabilized and player safety was improved. The interest in containing costs by limiting player compensation and the number of scholarships intensified as expanded revenues tempted universities to spend their new found largesse competing for players in what is a zero-sum rentseeking game. Once costs were under control, attention turned to expanding revenues.

Intercollegiate sports revenues expanded rapidly after World War II because of a confluence of independent events. First, the G.I. bill increased college enrollment by more than a million students per year from 1940 to 1950, increasing spectator demand for college and university sports. Second, the post-war baby boom increased the demand for college and university sports as the population of teenage boys and young men spiked during the 1960s. Third, the rapid post-war expansion of television receivers added broadcast demand to the steadily growing demand for live attendance.

In 1940 the University of Pennsylvania (Penn) had started to televise its home football games. By 1950 Penn was receiving \$150,000 nominal 1950 dollars for annual broadcast rights, but in 1951 the NCAA decided to prohibit televising college football games because the availability of the game on television might reduce live gate receipts. With so much money at stake, Penn refused to stop televising its games, whereupon the NCAA threatened to expel it by having Penn's opponents refuse to play the Quakers. With its entire season at risk, Penn retreated. To stabilize college football broadcasting, in 1952 the NCAA began a "Television Plan," which lasted 32 years. It was an agreement among members to televise only a single Saturday afternoon game each week and restricted the number of appearances by a team. The value of the restricted television broadcasting rights rose rapidly over succeeding decades. When

nothing about its actual goals. The NCAA's website claims it is "dedicated to the well-being and lifelong success of college athletes." But one might expect the "well-being of college athletes" to include the maximization rather than control of their compensation.

combined with March Madness, which began in 1980, broadcast revenues hit \$91 million annually in 1984 (Raiborn, 1986), 18 the year of the Supreme Court decision.

The first intercollegiate basketball championship was the 1938 NIT. The next year the NCAA initiated a competing tournament. For many years the two tournaments competed for teams. Eventually, the NCAA prohibited a team invited to its tournament from participating in the NIT under threat of penalties, which precipitated a court challenge from the NIT for a collective boycott. Just before the scheduled trial in 2005, the NCAA purchased the NIT and has since run it as a tournament for teams not invited to March Madness. The NCAA's three-week basketball tournament has been a huge financial success, attracting \$771 million dollars of annual broadcast rights fees by 2016, with a newly signed contract elevating that to \$1.1 billion per year. A small amount of the tournament's television rights fees fund NCAA operations.

Basic Principles of the NCAA

The two principal components of the NCAA's economic cartel operations that emerged in the wake of World War II are an agreement to: (1) limit the compensation and demand for the most essential input to games – players; and to: (2) restrict the number of games available for sale to broadcast networks. The former lowers costs relative to their level in a competitive player market, while the latter enhances broadcast revenues compared to their competitive level. The result is a large financial surplus for intercollegiate athletics, with a corresponding opportunity for other claimants such as coaches and administrators to tap into the excess.

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¹⁸ For 2016, *Forbes* estimates TV related revenue, including "both rights fees and, for the conferences with network ownership stakes, estimated profit shares" for the 10 Division I conferences, including the SEC, the Big Ten, the Big 12, the Pac 12, the ACC, the American, the Big East, the Mountain West, the Conference USA, and the Mid-American as \$1.38 billion, an increase by a factor of 15 over 32 years (Smith, 2016).

At the beginning of the agreement to sell college football television rights collectively, the NCAA limited broadcasts to just one game per week, creating artificial scarcity of games. Bids for the rights escalated rapidly, with three over-the-air networks chasing just a single source of game content. After the Court ended the broadcast rights agreement in 1984, the number of televised games increased rapidly, and rights fees per game plummeted to less than a third of the level they were under the plan (Siegfried and Burba, p. 807). But fees recovered quickly, as new technologies to record and play televised games without advertisements increased the relative value of advertising on broadcasts that viewers preferred to watch live, especially sports.

In contrast to professional sports leagues that contain player costs by revenue sharing (reducing rewards for winning), penalties on "excessive" payrolls (a payroll tax), limits on aggregate payrolls (a payroll cap), and limits on individual player compensation negotiated with players' unions, colleges have agreed among themselves through the NCAA to simply limit player compensation to a grant-in-aid. Because no players' union is involved in the decision, the result of such policies is not protected from antitrust laws by the 1935 National Labor Relations Act, as are the methods professional leagues use to limit compensation.

One should ask why the players accept only a grant-in-aid to work in an essentially full-time job. The answer lies partially in the assistance provided by the NFL and the NBA to colleges and universities by reducing alternatives available to talented young players. Since 1990 the NFL has refused to employ players who are fewer than three years past high school. And since 2006, the NBA has declared players who are less than a year out of high school ineligible for its entry level draft, creating the "one-and-done" college basketball phenomenon.

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¹⁹ Prior to 1990 the NFL required entry level players to wait until their high school class was four years beyond graduation to be eligible to work in the league.

These professional league policies have drastically reduced viable paid options available to young athletes. Other than play for college teams as a first-year student, elite basketball players might play professionally overseas for a year, but few have done so. Football players do not have even that option, because American-style football is not played outside North America. Thus, if young elite athletes want to continue to develop their physical skills and attract the attention of professional leagues, they have no alternative but to attend a big-time university sports program. In return for providing colleges with a labor force willing to work without pay, the professional leagues secure free employee training. They do not have to fund extensive development leagues as exist in baseball and ice hockey. Moreover, the age restrictions on players entering the NFL and NBA mean that players stay on entry-level contracts, compensation for which is limited by union-league collective bargaining agreements, until a higher age (one more year for basketball, three more years for football). This implies that players in their early to mid twenties, in the prime of their careers, can become free agents only at a higher age than they might have otherwise, saving their employers a lot of player compensation. The ban on younger players also reduces the risk to professional teams from immature players whose poor behavior might sully the league's reputation, or of contracting with injury-prone players.

Unsurprisingly, head coaches' and athletic directors' compensation is not limited by the NCAA (although in the 1990s assistant basketball coaches' salaries were temporarily subject to a \$16,000 ceiling). Nor does the NCAA control what an institution spends on athletic facilities, such as stadiums, locker rooms, or training facilities. The NCAA does, however, limit recruiting costs in order to help preserve the benefits flowing to those whose compensation is not restricted.

NCAA Cartel Operations: Surmounting Four Significant Challenges

Every cartel must overcome the difficulty of reaching agreement, the potential erosion of cartel profits by either non-price competition or member cheating, the deterrence of new entry attracted by the prospect of sharing the cartel profits, and the possibility that some members view the distribution of the cartel benefits as inequitable.

1. Reaching Agreement. Like any successful cartel, the NCAA must overcome four significant challenges. First, it must reach agreement among potential cartel participants to restrict games and broadcast output so as to elevate price above its competitive level, and also to adhere to a maximum amount paid to the players. Achieving agreement can be especially difficult when cartel members are heterogeneous. Colleges and universities face different athletic program costs and have divergent goals. Costs differ among them because private and public universities face different opportunity costs of offering a grant-in-aid to a student-athlete, ²⁰ and institutional objectives diverge because colleges and universities differ significantly in terms of emphasis on teaching, research, and public service, among other things.

Small selective liberal arts colleges usually field a wide array of intercollegiate athletics teams so as to provide opportunities for students they recruit primarily as students, not athletes. Small liberal arts colleges subsidize all of their sports programs, from intramurals to intercollegiate competitions. The programs are part of the amenities they provide students.

Large state universities, in contrast, usually field fewer athletics teams than liberal arts colleges, excluding many sports that do not generate much revenue. Big-time programs focus on money-making sports – football and men's basketball – with only a few also able to turn a profit, or at least minimize losses from women's basketball, men's ice hockey, and baseball.

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²⁰ In addition to differences in the cost of a grant-in-aid to universities with different levels of tuition and fees, those institutions with excess capacity face only marginal cost of enrolling an additional athlete on a grant-in-aid, while institutions at capacity face losing the average net revenues from a non-athlete when they add a scholarship athlete.

Even within the now six separate NCAA football governance categories, substantial differences remain. Stanford, Northwestern, and Vanderbilt are each in a power conference, along with Washington State, Nebraska, and Mississippi State. These two sets of institutions are quite different in terms of tuition, student characteristics, emphasis on faculty research, academic programs offered, and public service responsibilities. The differences can create cost differences as, for example, an athletics scandal at Stanford or Northwestern has vastly different consequences for the institution's academic reputation than a similar scandal at an institution with less academic reputation at stake. Moreover, tuition at the private universities listed first is more than double tuition at the publics in the second group. At some universities grants-in-aid are charged to the athletics department, while at others they are not. With such differences among members, it is remarkable the NCAA has coalesced for over 60 years as a vibrant cartel.

Reaching and maintaining an agreement among competitors to reduce competition in the sale of broadcast rights and in the acquisition of player talent would normally also face the considerable difficulty of likely antitrust challenges. But the NCAA has been able to avoid charges of conspiring to control compensation of its players by perpetuating an image of the players as "student-athletes" rather than employees. And after the 1984 Supreme Court decision that voided the NCAA's nationwide broadcast cartel, there has been no subsequent challenge to the collective sale of broadcast rights on a smaller scale at the conference level.

2a. Controlling Non-price Competition. Second, the cartel must protect its economic rents earned as a consequence of the agreement from erosion either by non-price competition or cheating on the agreement. Because excess profits are earned on each unit sold, cartel members are tempted to advertise, improve service, innovate, or otherwise expend funds in an effort to add unit sales at the expense of rivals—called non-price competition. If all cartel members confront

similar incentives, such non-price competitive efforts may cancel out. Eventually the only thing that changes as a result of the quest for more sales is that everyone's costs rise and profits fall.

Opportunities for the use of non-price competition to attract additional unauthorized television broadcast sales by individual teams are non-existent because broadcasts are vividly transparent. But on the labor side of operations there are many opportunities for individual cartel members to deviate from the agreement. Intense recruiting can feed the egos of high school players, their families, and their coaches. Better training and playing facilities, luxurious locker rooms, better culinary experiences, special academic tutoring, travel to attractive locations for non-league games, and the professional marketing and promotion of successful players seeking recognition can all sway a 17-year-old's college or university choice. The possibilities for non-price competition are vast, and have been known even to extend to cash payments, phony jobs, benefits to family members, and escort services for prospective players or their family members.

When direct price (salary) competition is prohibited, non-price competition will increasingly affect prospective players' choices about which institution to attend. The effect of a larger role for non-price competition in player decisions impacts competitive playing balance among teams, but the direction is unclear. In addition to the many small non-price benefits that universities use to compete for players, the existing system of capped compensation for players bestows tremendous recruiting advantages to prestige programs with a history of winning, producing professional athletes, and with coaches with substantial name recognition. Institutions such as Santa Clara or the University of Maine face an uphill battle recruiting against Alabama in football or Kentucky in basketball, with their high-profile programs and coaches. How cash compensation would affect competitive balance depends on the relative preferences of various talented players for monetary compensation versus their perceived value of the non-cash benefits

of playing for various institutions. Since there must be at least some talented players who favor cash, eliminating the cap on player compensation is likely to divert some players to universities that had no chance at attracting them with just program prestige and up-to-date facilities.

Even if competitive balance were to decline, demand may not. Intercollegiate athletics currently is popular despite a high degree of imbalance. The demand for dominant teams and the enjoyment fans of non-dominant teams get when their team occasionally upsets an elite team may outweigh the value of more competitive balance (Coates, et al., 2014). After all, it is the elite teams that create an opportunity for other teams to be dragon slayers. A more serious challenge to maintaining demand could arise if players receive cash compensation. The demand for college sports may depend, at least in part, on the very fact that the players aren't paid and are perceived primarily as "students."

2b. Preventing Cheating. A successful cartel must protect its profits from erosion by cartel members cheating on the agreement. Cartel participants face an incentive to defect on the agreements on number of games played, broadcast output and maximum player pay. Prices exceeding a competitive level create an inherent incentive for cartel members to violate the agreement because each extra sale at an elevated price earns excess returns. Attracting more sales for an expenditure less than the expected above-normal return is a profitable move. If all cartel members defect, however, the restriction on output necessary to support the elevated price evaporates. To deter cheating, it must be detectable so that it can be punished and thereby discouraged, which is why defectors act secretly. Of course it is impossible to broadcast or even play college football games in secret. Such a violation would immediately garner retribution. In sports, where two teams are necessary to produce a game, punishment can be certain and severe, as the offending team's scheduled opponents can refuse to play the cheater. *Competitors can*

drive a defector's output to zero. The punishment can be intensified further if the NCAA coordinates an all-sports boycott of the offending institution, thus raising the cost of cheating and putting a lot of pressure on an institution to stick to agreement parameters.

In contrast, cheating on the agreement to restrict player compensation and limit recruiting expenses is more difficult to monitor. Because it is much easier to conceal illicit payments to players, provide benefits indirectly (e.g., in cash, to friends or relatives, or as payment for a fake summer job), and virtually impossible to efficiently monitor hundreds of thousands of contacts between coaches and prospective players, violating the labor cost control rules of NCAA cartel operations is more likely. But it does not jeopardize the overall agreement as directly as does cheating on broadcast limits, because the amounts at stake in each transaction are much smaller.

The temptation to defect on the agreements depends on balancing the value of the expected advantage the defection creates against the cost of being caught, which, depends on the combined likelihood of being caught *and* the severity of punishment if caught. Over 70 years ago, George Stigler (1946) observed that the probability of defecting depends on the number of cartel participants because the effect of cheating in cartels with many participants is difficult for other members to detect when it is widely dispersed. Because over two hundred NCAA Division I football teams compete for elite high school football players, and over three hundred compete for premier basketball players, it would seem that the NCAA cartel would swiftly collapse because nobody adhered to the agreements on compensation and recruiting.

To minimize the prospects of such an outcome, the NCAA employs an investigation staff of about 50 to identify and evaluate claims of cheating on cartel rules. Almost all of these claims involve player recruiting, compensation, or academic eligibility. The NCAA also relies on teams to discover improprieties and report them, which many do because the punishment of rival team

violations can improve the competitive record of whistleblowers. The real bite in the likely cost of cheating comes not from a high probability of detection, however, but rather from the severity of penalties the NCAA can levy, including bans on post-season football or basketball play and the corresponding loss of financial and status benefits of such appearances, as well as restrictions on the number of scholarships, and thereby team strength, allowed in future years. In extreme cases, the NCAA can even close a program for a period.²¹ Moreover, penalties can be extended to cover sports other than those where the violations occurred. For example, in 1981 when NBC offered the CFA a 4-year \$180 million football contract to leave the NCAA, the NCAA threatened expulsion of all 62 CFA institutions for all sports. The CFA retreated. With such severe punishments carrying large financial and reputational implications, the expected cost of cheating can be large in spite of a small chance of a violation being detected, thus overcoming the effect of a large number of participants that Stigler thought would undermine any agreement.

The incentive to cartelize has proven irresistible in big-time college sports. Demand by television networks for live-game content is relatively inelastic, in part because the alternatives available to sports television networks are not attractive--Saturday afternoon reruns of old sitcoms, or jewelry, weight loss, or cosmetics infomercials--and in part because live television content commands higher advertising rates. Professional leagues are reticent to compete against colleges by airing games on Saturdays, the traditional day for college games, for fear of threatening their 1961 Congressional broadcasting cartel exemption from the Sherman Act.

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²¹ In 1987 and 1988 the NCAA closed the football program at Southern Methodist University because of "a lack of institutional control," when it discovered that athletic department employees were assisting in providing cash payments to players. In 1952-53 the NCAA closed Kentucky's men's basketball program because of complications arising from some players accepting payments from gamblers to shave points in games.

Because costs associated with fielding a college sports team are largely fixed, including stadium and player costs, extra broadcasting or ticket revenue falls right to the bottom line.²² A high fixed-to-variable costs ratio also favors agreement in order to avoid a broadcasting price war or player bidding war, since in such circumstances rights prices could be cut substantially or player costs elevated significantly and still leave revenues comfortably covering variable costs.

Research on cartels finds that trade associations often help coordinate anti-competitive agreements, especially when there are large numbers of potential cartel members (Fraas and Greer, 1977; Hay and Kelly, 1974). Thus, it is natural that the interest of the NCAA, initially formed to improve player safety and coordinate playing rules, migrated to the control of costs and expansion of revenues. Absent the pre-existing organization, it may have proved impossible for hundreds of institutions to organize for the purpose of expanding revenues and cutting costs as the NCAA successfully did. The NCAA may be *the* classic case of a trade association orchestrating a cartel for its members' economic benefit, while simultaneously touting a "moral high ground" image that it is pursuing a lofty goal—enhancing the "student-athlete" experience.

3. Deterring New Entry. The third challenge a successful cartel must confront is to prevent erosion of its monopoly profits by new entrants attracted by its success. The NCAA's Division I FBS, which attracts almost all the substantial revenues, has been quite successful in fending off potential entrants. There are many major universities without a commercialized intercollegiate athletics program (e.g. University of Chicago, MIT, Emory, Carnegie-Mellon) that could try to enter the big-time, as did Michigan State successfully in the 1950s and Louisville, Houston, and Boise State more recently. But by and large, entry has not been a source of new competition for the NCAA's elite sports universities because the programs that

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²² The largely fixed cost nature of the sports production function also encourages expanding the length of the regular sports season, and the addition of ever more post-season games.

have upgraded were already NCAA members and had agreed to abide by the cartel rules. Moreover, upgrades are hampered by NCAA requirements on the capacity of playing facilities, a minimum number of games played against Division I teams that are hard to schedule, recent minimum attendance levels, a minimum number of scholarships that must be awarded (raising costs for entrants), and a minimum number of sports in which the institution must participate.

Only 14 universities have gained NCAA Division I status since 2000. The challenge of acquiring access to one of the five power conferences, to football bowl games, or to March Madness are additional hurdles facing new competitors. In October 2016 two recently successful football programs, the University of Houston and Brigham Young University were both denied entry to the Big-12 conference even though they both fit its geographic profile and the Big-12 had only 10 teams at the time.²³

4.Distributing the Spoils Fairly. The fourth challenge to a successful cartel is to satisfy its members that the fruits of their efforts are distributed equitably. In some cases, this can be daunting, as various members may have diametrically opposed views about what is "fair." Those who do not contribute to the output (e.g., teams whose games are not televised) are likely to favor more equal distribution, while those who do produce the output (those chosen to appear on televised games) are likely to favor a distribution principle based on production.

All potential competitors must share in the spoils to some extent, because even those whose output is constrained to zero to reduce industry output contribute to elevating price. If any team or group of teams receives less than they believe they could make by competing independently, they may bolt the agreement, creating problems for the surviving cartel members.

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²³ The primary argument against conference expansion is the need to divide shared (mostly broadcasting) revenues among more institutions.

In order to distribute the benefits of its broadcast rights cartel from 1951 through 1983, the NCAA first used some of the revenues to cover the association's operating costs, so all members were relieved of having to pay dues. It also limited the number of annual television appearances for each team because most of the revenue was distributed to institutions based on appearances. Limiting the appearances of teams forced a wider distribution of the broadcast revenues. But the wider distribution also limited the revenues accruing to those teams that spent the most on their athletic programs and felt they deserved a greater share. This eventually led the universities of Georgia and Oklahoma to sue the NCAA for perpetrating a cartel to market college football's broadcast rights (the 1984 Supreme Court decision).

When the CFA began to negotiate football broadcast contracts on behalf of three of the power conferences and a few independents in 1984, it boosted annual base payments to \$50,000 to each team to foster loyalty from teams that did not expect to appear frequently. The CFA had to rely more on carrots (money) than sticks (punishment for defecting) to maintain cartel stability because it could not impose draconian penalties on defectors like the NCAA could. Even so, Penn State left in 1990, followed by Notre Dame in 1991. And from 1984, the SEC persistently negotiated an ever increasing share of CFA revenues on the basis that it contributed the most attractive games to the CFA inventory. Unable to secure a share of broadcast rights revenues that it deemed "fair" based on its contribution to the product, in 1996 the SEC finally left the CFA in favor of an independent broadcast contract with CBS, effectively ending the CFA cartel.

College football and basketball scheduling also provides a means of sharing the wealth beyond the premier teams that networks select for appearances.²⁴ This helps to placate institutions whose teams are not selected to appear on television. Because all conference

²⁴The NCAA, CFA, Big-Ten/Pac-10 and now individual conferences all left the selection of the particular games to broadcast to the networks in order to increase the value of the broadcasting rights.

schedules consist of fewer games than the NCAA maximum, teams usually schedule two to four non-conference games in football and 10-12 non-conference games in basketball each year.

Some of these are popular rivalries against elite teams in other conferences, but some are against weaker teams (often in the FCS in football) that are unlikely to warrant television appearances on the basis of their traditional talent levels. These games are all home games for the dominant teams so they can include them in their season ticket packages at prices exceeding that which would be justified by the individual matchup. Visiting teams are paid a lump sum that exceeds what they could have expected to earn at their (usually smaller) home stadiums or arenas if they had scheduled a two-game home-and-home series, but is less than the receipts the home team can generate at its larger stadium or arena. Both teams in "purchased" games gain financially, and the perennial powerhouse usually gets a win that may help it to qualify for post-season play.

Once in a while the underdog team upsets the powerhouse, generating immense publicity for it.

How Will Change Arrive, if it Ever Does? Internal Reforms and Lawsuits

In what may have been an attempt to head off more drastic changes in the intercollegiate sports business model, in April 2014 the NCAA's Division I voted to allow its members to offer unlimited meals and snacks to their athletes, spawning a new intercollegiate competition in food provision.²⁶ Subsequently, the NCAA altered its organizational structure to allow the five premier college athletic conferences and Notre Dame to operate under a different set of rules than other teams for governing football.²⁷ This allows conference teams to provide additional

²⁵ Such a "side payment" in a cartel is called a "true-up" in the standard cartel literature (Marshall and Marx, 2012).

²⁶ This change was provoked by University of Connecticut basketball player Shabazz Napier announcing on national television immediately after the Huskies won the 2014 national collegiate men's basketball title that he frequently went to bed hungry because of NCAA restrictions on "excess food."

²⁷ This action essentially added a new, sixth division to the NCAA for football governance purposes.

benefits to their scholarship athletes that would be harder for other teams to afford, such as compensation up to the "full cost of attendance" at each institution. Other proposals under consideration include a requirement that schools shift from the one year guaranteed length of a grant-in-aid instituted in 1973 to multi-year scholarships. At present, most grants-in-aid are not automatically renewable from year to year, although since 2012 a few individual institutions and the Big-Ten have acted unilaterally to offer multi-year grants-in-aid.

But these changes fall well short of a free competitive labor market for college athletes (Sanderson and Siegfried, 2015), which is the goal of several contemporaneous lawsuits. First, there is the 2009 complaint in *O'Bannon v. NCAA* decided by a San Francisco trial court in August 2014. Ed O'Bannon, a player on UCLA's last national championship basketball team, argued that after players leave college they should share revenues from the commercial use of their image; the NCAA asserts lifetime control over those rights. The case grew to include also television broadcast rights of players while they are in college. U.S. District Court Judge Claudia Wilken ruled in *O'Bannon* that the NCAA's agreement to cap player compensation at a grant-in-aid violates Section I of the Sherman Act because it is collusion in restraint of trade.

To complicate matters, however, Judge Wilken suggested that a compensation cap set above the current level of grants-in-aid (by \$5,000) might withstand legal scrutiny. Her ruling²⁸ was appealed and the Ninth Circuit Court of Appeals agreed that the NCAA cap on player compensation is indeed illegal, but stipulated that the "full cost of attendance" (as used for general financial aid awards) rather than \$5,000 should be the maximum compensation allowed student-athletes. Either of these decisions in essence caps player compensation *by the courts*,

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²⁸ Available at http://s3.documentcloud.org/documents/1272774/obannon-court-decision.pdf.

and renders irrelevant the NCAA agreement. In September 2016 the U.S. Supreme Court declined to hear an appeal. The current status of this decision is untenable.

The confusion O'Bannon has created in the market for college football and men's basketball players may be resolved by two subsequent cases moving through the same Ninth Circuit in California. One suit originally filed on behalf of former running back Shawne Alston requests that he be paid the earnings he might have received from West Virginia University if it had not colluded with other universities to restrict his pay to a grant-in-aid. In 2016, that case was consolidated with similar cases and certified as a class action. In February 2017, plaintiffs in the Alston case and the NCAA reached a settlement for \$209 million to cover the additional amount Alston and his colleagues might have been paid if "full cost-of-attendance" had been used as the basis for grants-in-aid, as the Ninth Circuit decided was allowed. The question of whether any player compensation cap is permissible remains in dispute, however, and is scheduled for trial in late 2017. To add fuel to the fire, in March 2014, prominent sports labor attorney Jeffrey Kessler filed a separate lawsuit (Farrey 2014) on behalf of Martin Jenkins, a former Clemson football cornerback, against the NCAA.²⁹ Kessler asks only for an injunction to end collectively imposed restrictions on player pay. These cases are now in San Francisco District Court under Judge Wilken's supervision.

It is impossible to forecast the eventual outcomes of these cases, but the precedents from two earlier NCAA legal defeat – the 1984 television broadcast rights price-fixing case and a 1998 assistant basketball coaches' wage-fixing case³⁰-- suggest the NCAA is in risky territory

²⁹ The plaintiff in the case is Jenkins, but the name usually mentioned is his attorney Kessler, because he is a formidable legal opponent in sports labor law. Kessler won the case that led to free agency for NFL players.

³⁰ The NCAA used to fix the salaries of the third assistant basketball coach, but a 1998 Court of Appeals ruling held that this limit was collusion in restraint of trade, an antitrust violation costing the NCAA a judgment of \$66 million (Law v. National Collegiate Athletic Association, 134 F.3rd 1010 [10th Circuit 1998]).

with respect to its agreement to limit player compensation to a grant-in-aid. These pending lawsuits have the potential to cause changes beyond the small steps recently taken by the NCAA.

What might happen if Alston or Jenkins ultimately prevails and elite college athletes can sell their services in a truly competitive market? With many aggressive coaches, it is inevitable that with no pay limit, some universities will offer their better players financial incentives to stay on their team, and will include cash in offers to new recruits. As some teams do so, others will follow. Worsening financial conditions will probably cause some universities to drop out of big-time intercollegiate athletics. A victory by either Alston or Jenkins probably ends the NCAA's current business model. Concurring with this view, NCAA President, Mark Emmert, said recently that if Kessler won his lawsuit, it would "blow up college sports" (Strauss, 2014).

What Does the Future Hold?

If the legal challenge to the NCAA's collective agreement to limit the pay for players is successful, at least initially expenditures that have been absorbing the rents are unlikely to diminish. Revenues could increase to cover some of the additional costs of paying star players, but it is difficult to predict the shape of the broadcasting landscape twenty or even ten years in the future, as technological change is likely to restructure it and the amount and distribution of revenues faster than that. Whether changes will lead to higher or lower rights fees earned by colleges is unknown. Alternative technological routes to access live sports programming or that block advertisements may undermine the current value of television broadcast rights.

As player pay begins to increase if the pay cap is relaxed, the costs of big-time athletics programs will rise and demand may wane as fans lose interest because of the very fact that the players are compensated, and the myth of the "student-athlete" becomes more tenuous. If this

happens, the surpluses for the 20-25 programs that are currently profitable could start to fade, while the subsidies from general university funds to the athletics departments at institutions currently reporting a loss increase. University presidents will have to confront difficult questions: "How much is too much of a subsidy? When do the external benefits from fielding a competitive FBS football or a March Madness tournament basketball team begin to fall short of the value of the research and teaching sacrificed to support the team financially?"

Yet another worry for college presidents with big-time athletics programs should be the possibility of entry into the most lucrative segment of their sports empires. In January 2017, Don Yee (Tom Brady's agent) announced a new professional football league of four teams that will employ 18 - 22 year old men who don't qualify for college or who don't want to wait to earn money as players (Futterman, 2017). Such a player development league, if successful, could siphon some of the better players from colleges and universities and divert some of the demand for college football to development league football. While a small startup league of four teams is no worry to the NCAA, it could eventually grow into a serious threat.

Unless Congress were to intervene so as to legalize the continuation of the NCAA's cartel behavior limiting player compensation, which is not beyond a possibility, it seems unlikely that the organization of big-time commercialized intercollegiate athletics 10 years from now will resemble today's arrangements. Get ready for change.

References

Alexander, Donald L. and William Kern. 2010. "Does Athletic Success Generate Legislative Largess from Sports-Crazed Representatives? The Impact of Athletic Success on State Appropriations to Colleges and Universities." *International Journal of Sport Finance*. Vol. 5, p. 253-267.

Alsher, Jason. 2017. Five College Conferences that Bring in More than \$250 Million. *Sports Cheat Sheet* (January 4)

Anderson, Michael L. 2012. "The Benefits of College Athletic Success: An Application of the Propensity Score Design with Instrumental Variables." NBER Working Paper No. 18196 (June).

Berkowitz, Steve, Jodi Upton, and Erik Brady. 2013. "Most NCAA Division I Athletic Departments Take Subsidies. *USA Today* (July 1, 2013).

Byers, Walter. 1995. Unsportsmanlike Conduct. The University of Michigan Press.

Carroll, Kathleen and Brad R. Humphreys. 2016. "Opportunistic Behavior in a Cartel Settiing: Effects of the 1984 Supreme Court Decision on College Football Television Broadcasts." *Journal of Sports Economics*, Vol. 17(6), pp. 601-628.

Clotfelter, Charles T. 2011. *Big-Time Sports in American Universities*. Cambridge University Press.

Coates, Dennis, Brad R. Humphreys, and Li Zhou. 2014. "Reference-dependent Preferences, Loss Aversion and Live Game Attendance." *Economic Inquiry* Vol. 52, No. 3, 959-973.

Farrey, Tom. 2014. "Jeffrey Kessler Files Against NCAA," ESPN.com. March 18.

Fleisher, Artur A. III, Brian L. Goff, and Robert D. Tollison. 1992. *The National Collegiate Athletic Association: A Study in Cartel Behavior*. University of Chicago Press.

Fraas, Arthur G. and Douglas F. Greer. 1977. "Market Structure and Price Collusion: An Empirical Analysis." *Journal of Industrial Economics*, pp. 467-490

Frank, Robert H. 2004. "Challenging the Myth: A Review of the Links Among College Athletic Success, Student Quality, and Donations." *Knight Foundation on Intercollegiate Athletics* (May).

Fulks, Daniel L. 2016. NCAA Division I Intercollegiate Athletics Programs Report, 2004-2015: Revenues and Expenses. The National Collegiate Athletic Association: Indianapolis, Indiana (July).

Fulks, Daniel L. 2008. NCAA Revenues and Expenses of Division I Intercollegiate Athletics Programs Report. The National Collegiate Athletic Association: Indianapolis, Indiana.

Futterman, Matthew. 2017. "An Alternative to the NCAA." *The Wall Street Journal*. (January 12, p A14.

Gaguin, Deirdre A., and Mary Meghan Ryan. 2014. *The Who, What and Where of America: Understanding the American Community Survey*, Fifth Edition. Bernan Press.

Getz, Malcolm and John J. Siegfried. 2012. "What Does Intercollegiate Athletics Do To or For Colleges and Universities? Chapter 19 in L. Kahane and S. Schmanske, eds. *Handbook on Sport Economics*. Oxford University Press.

Grant, Randy R., John Leadley and Zenon Zygmont. 2008. *The Economics of Intercollegiate Sports*. World Scientific Publishing Company.

Hay, George A. and Daniel Kelley. 1974. "An Empirical Survey of Price-Fixing Conspiracies." *Journal of Law and Economics*, (April) Vol. 17, pp. 13-18.

Hoffer, Adam, Brad R. Humphreys, Donald J. Lacombe, and Jane E. Ruseski. 2014. "The NCAA Athletics Arms Race: Theory and Evidence." Working Paper, Department of Economics, West Virginia University.

Hoxby, Caroline. 2014. "The Economics of Online Postsecondary Education: MOOCs, Nonselective Education, and Highly Selective Education." *American Economic Review* (May) Vol. 104, No. 5, pp. 528-533.

Humphreys, Brad R. 2006. "The Relationship between Big-time College Football and State Appropriations for Higher Education." *International Journal of Sport Finance*, Vol. 1, pp. 119-128.

Kirk, Jason. 2014. "College Athletic Departments Aren't Necessarily as Broke as you Think." *SBNation.com* (June 6).

Knight Foundation Commission on Intercollegiate Athletics. 2006. *Public Opinion Poll*. (January)

Koch, James V. 1973. "A Troubled Cartel: The NCAA." *Law and Contemporary Problems* (Winter) Vol. 38, pp. 135-150.

Lifschitz, Arik, Michael Sauder and Mitchell L. Stevens. 2014. "Football as a Status System in U.S. Higher Education." *Sociology of Education*, Vol. 87, No. 3, pp. 204-219.

Marshall, Robert C. and Leslie M. Marx. 2012. *The Economics of Collusion: Cartels and Bidding Rings*. MIT Press.

Pope, Devin G. and Jaren C. Pope. 2009. "The Impact of College Sports Success on the Quantity and Quality of Student Applications." *Southern Economic Journal*. 75(3), 750-780.

Raiborn, Mitchell H. *Revenues and Expenses of Intercollegiate Athletic Programs*. Rep. Vol. 4. NCAA, 1986.

Sanderson, Allen R.. and John J. Siegfried. 2015. "The Case for Paying College Athletes." *Journal of Economic Perspectives* Vol. 29, No. 1 (Winter), pp. 115-138.

Sanderson, Allen R. and John J. Siegfried. 2015. "Pastimes, Seriously," *The Milken Institute Review*, Third Quarter, Vol. 17, No. 3, pp. 84-92.

Sargeant, Keith and Steve Berkowitz. 2014 "Subsidy of Rutgers Athletics Jumps 67.9% to \$47 Million." *USA Today*. (February 23).

Sasser, Alicia. 2008. *The Future of the Skilled Labor Force in New England: The Supply of Recent College Graduates* (Federal Reserve Bank of Boston, New England Public Policy Center, September)

Siegfried, John J. and Molly Gardner Burba. 2004. "The College Football Association Television Broadcast Cartel." *The Antitrust Bulletin*, (Fall) pp. 799-819.

Smith, Chris. "Most Valuable College Conferences 2016" Forbes. 26 July 2016.

Stigler, George. 1964. "A Theory of Oligopoly." *Journal of Political Economy*. February, Vol. 72(1), pp. 44-61.

Strauss, Ben. 2014. "After Ruling in O'Bannon Case, Determining the Future of Amateur Athletics." *New York Times* (October 21).

U.S. Department of Education, Office of Postsecondary Education, *Equity in Athletics Data Analysis* website, accessed January 15, 2017.

Zimbalist, Andrew. 1999. Unpaid Professionals. (Princeton University Press).