THE COLLEGIATE ATHLETIC "ARMS RACE": A RATIONAL RESPONSE TO NCAA REGULATIONS

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ABSTRACT

College sports programs are repeatedly investigated by the NCAA for violating rules forbidding player compensation. However, many collegiate athletic programs find themselves in a "facilities arms race" in which institutions are spending millions of dollars for athletic facilities. People take at face value that the NCAA simply is protecting the "integrity" of amateur athletics. In this paper, however, we take a different look, modeling NCAA Division I sports as a regulated cartel in which competition is permitted in some areas but forbidden (or allegedly forbidden) in others. We compare this model to the *de facto* cartel that existed in the airline industry until 1978, when Congress voted to deregulate the industry. Our paper specifically looks at the forms of non-price or extracurricular competition that exist when regulations restrict prices either to consumers or for the payment of key resources.

INTRODUCTION

The spate of stories involving colleges and universities belonging to Division I of the National Collegiate Athletic Association (NCAA) being investigated for wrongdoing seems to be never-ending. At this writing, the athletic programs of 34 colleges and universities in the NCAA's Division I are on probation for various rules infractions, including the University of Oregon, University of Mississippi, and the University of Louisville. Programs as diverse as football and women's volleyball and swimming are named as the rules offenders.

A decade ago, the NCAA was investigating Auburn University in 2010 for alleged infractions in football, and while the investigation proceeded, the university also was completing construction of a new, state-of-the-art basketball arena. Likewise, at about the same time, Tennessee was completing a multi-million-dollar facelift to its on-campus football facility, the venerable Neyland

Stadium, at the same time NCAA officials were looking into that university's football program to see if coaches had broken NCAA rules.

To critics, such actions seem almost irrational. While the athletic programs of these universities were accused of rule breaking and "corruption," they often are simultaneously spending millions of dollars to improve or build new facilities to further the very athletic programs that have placed the reputations of the universities in peril.

In 2017, 10 assistant coaches of Division I basketball coaches were arrested – including an assistant at Auburn – amid an FBI probe of collegiate basketball programs, a high-profile action that resulted in convictions in federal court of three agents involved in funneling money to collegiate prospects. One coach named in the scandal; the legendary coach Rick Pittino lost his job when Louisville University fired him after the allegations became public. In the wake of three wire fraud convictions in federal court, the NCAA at the current time is weighing penalties for a number of programs (Kerkhoff, 2019).

Public and media reaction to the stories is uniform: the media calls offenders "cheaters," coaches and their staffs often are fired along with athletic directors caught up in the scandals. The NCAA then places the offending institution on probationary status, with punishments being as diverse as loss of scholarships, recruiting restrictions on coaches, forfeiture of past games and championships, or even bans on playing in the post-season. Some universities, including Southern Methodist University and the University of Kentucky, suffered the NCAA "death penalty" by having a sports team closed down for a season.

The NCAA regulations involved a stated attempt to preserve amateur athletics (athletes are not paid directly for their services), but we would like to take another view, one that applies economic models to the NCAA and how it operates its vast sports complex. In this paper, we not only examine the NCAA operation itself, but we also look at its sets of rules and policies and model the NCAA after the various regulated business organizations, such as the U.S. airline industry before Congress and the Jimmy Carter administration deregulated it in 1978. While the popular view that NCAA rules are necessary to "protect the integrity" of college athletics makes for good moral theater in the media, such a perspective does not hold up to economic analysis. Instead, we believe that a view that models the NCAA to the old Interstate Commerce Commission and its member institutions as firms competing within the framework of a regulated industry better explains the behavior we observe, such as building palatial athletic facilities and giving players clandestine but "improper" benefits. We specifically examine the old regulatory structure of the U.S. airline industry disbanded by Congress in 1978 as a model to help us take a closer look at the rules and structure of NCAA sports and the outcomes that arise when teams break rules.

In our comparison of the NCAA to the old regulatory structure that governed U.S. airline companies before 1978, we look at the so-called "arms race" in college sports that involve the increase in coaches' salaries, and the spending of millions of dollars for new athletic facilities. Furthermore, we tie this development to the very rules that restrict the financial benefits that collegiate athletes can receive.

Obviously, there are differences between the structure of college sports and regulated industries, but there also are similarities and this paper will dwell on both. Our purpose is to present an alternative from the "good guy-bad guy" paradigm presented in the media and popular literature, showing a model that examines incentives for rule breaking that are contained within the NCAA regulatory structure.

We first point out that the two regulatory structures we are comparing have elements of non-price competition that are vital to understanding the behavior of people in both industries. With the airline industry, airlines were not permitted to compete based on price to consumers; while in NCAA sports, the non-price restriction is applied to a *key resource,* that being the individual athlete who will play for a collegiate team.

We examine the behavior that is associated with the elements of non-price competition to see how these two "industries" operated within such strictures to see if we can find similar actions that would result in both industries. After all, non-price competition restrictions do not eliminate competition; they simply shift it to other arenas. In this paper, we compare and contrast those particular avenues of competition to see if our viewpoint of the NCAA as an economic model actually is credible.

The next section examines the NCAA, giving a brief history of how the organization came to its present structure, and examine some of the rules that restrict compensation to collegiate athletes. The section after that will examine the regulatory structure of airlines that existed until 1978. After that, we will compare the two industries and draw conclusions.

THE NCAA HISTORY AND REGULATORY STRUCTURE

This section draws heavily not only from the NCAA's own website (NCAA, 2015), but also from Depken and Wilson (2006), who examined the relationship between NCAA rules and the "competitive balance" in Division I football (or what is known today as the BCS). While the NCAA is one of four organizations that serve college sports, it clearly is the largest and most influential, and it represents the so-called major players in college sports, the colleges and universities that have the best-known sports teams. Besides the NCAA, there is the National Association of Intercollegiate Athletics (NAIA), the National Christian College Athletic Association (NCCAA), and the National Junior College Athletic Association (NJCAA).

The NCAA operates three divisions, including Division I, which has the major sports programs, including the NCAA Basketball Championships (nicknamed "March Madness") which Depken and Wilson point out is a key revenue generator for the organization, along with the BCS football bowl games. Division II athletics includes small and medium-sized colleges and universities that have athletic scholarships but where sports are not large revenue generators, and Division III, which consists of relatively small colleges that do not give scholarships for sports.

The focus for NCAA sports, obviously, is in Division I football and basketball, although the NCAA has 87 championships sports for both men and women, including gymnastics, ice hockey,

track and field, and baseball and softball (NCAA, 2015). The main reason is that Division I men's football and basketball bring most of the revenues for the NCAA. Most other collegiate sports do not generate enough revenues to cover their own expenses.

Depken and Wilson write that since 1946, the NCAA has governed athletics through its "Code of Sanity," which the NCAA claims to "protect" its athletes from "exploitation" and seek to preserve amateur athletics. The NCAA permits member institutions (except for Division III, which grants no official athletic scholarships) to make in-kind payments to athletes that do not exceed books, tuition, room and board. Cash payments are forbidden as well as other benefits that the NCAA deems would not be available to other members of the college or university's student body. (The NCAA also has many rules that restrict recruiting practices for prospective athletes, ostensibly for the purpose of protecting the prospects and their families.)

Institutions and individuals that violate these rules (which fall into major and minor – or secondary – categories) can receive punishment from the NCAA, which will vary from the loss of scholarships, prohibition from post-season play, or, as was the case with the Southern Methodist University football team in 1987, be forbidden to field a team for a specified number of years. The question as to whether these actions serve (economically speaking) as "cartel enforcement" (Fleischer, Goff, and Tollison, 1992) or simply as a rational means by which to "protect" student athletes has been debated in the literature and is not our primary focus in this paper.

Instead, this paper points out how the NCAA rules forbidding "extra" payments to a key resource result in *other forms* of competition for other key resources and for the consumer dollar. We compare it to the former U.S. airline regulation regime that also restricted prices, albeit for airline fares, in which there was substantial non-price competition for passengers. We further explore these points in the next section by examining the regulated airline industry.

FLYING THE FRIENDLIER SKIES: COMPETITION AND REGULATION

From 1938 to 1978, the U.S. Government made the airline industry a state-sponsored cartel, restricting competition for interstate carriers by regulating routes and fares (Vietor, 1990). Congress ended that regulatory regime through efforts of President Jimmy Carter, Sen. Edward Kennedy and economist Alfred Kahn, who headed the Civil Aeronautics Board (CAB).

We use airline regulation as a model to examine the NCAA because an important aspect of competition between airline firms was based upon *non-price* competition. The CAB, which oversaw regulation of airlines, not only effectively set schedules for the competing airlines, but it also set fares, which meant that the firms could not compete with each other for passengers on the basis of price.

Yet, they still had to compete for passengers. As Vietor notes, this took many forms, including comfortable surroundings, free alcoholic drinks, piano lounges, hot meals, more legroom, and petite female flight attendants, often dressed complete with high heels. Ball (2011) writes:

> Shedding their white gloves and raising their hemlines, stewardesses imparted a mixed message of flirtation and personal indenture.
>
> Advertising for National Airlines had Debbie/Cheryl/Karen cooing "Fly Me" (or, even less ambiguously, "I'm going to fly you like you've never been flown before"), and Continental claimed "We Really Move Our Tails for You."
>
> Braniff coyly asked "Does your wife know you're flying with us?" and Pacific Southwest Airlines stressed the advantage of an aisle seat, the better to see its miniskirted workforce. Male passengers were assumed to be overgrown frat boys: Eastern Airlines provided, in fact, them with little black books to collect stewardesses' phone numbers.

The price restrictions also provided a number of perverse incentives to expand their facilities, make larger and more luxurious aircraft, and increase capacity on their routes. Vietor writes:

> With capacity and route expansion foreclosed as outlets for product differentiation, the trunk carriers devised new means of service competition. "Capacity wars" gave way to "lounge wars." On wide-bodied aircraft, lounges were introduced in first class, then in coach. When American installed piano bars, TWA countered with electronic draw-poker machines. Live entertainment proliferated, with musicians, magicians, wine-tasters, and Playboy bunnies. (pp. 78-79)

Alchian and Allen (1983) write:

> Even when a federal regulatory agency enforced the former U.S. domestic airline cartel, there was inadequate control of competition in the quality of airline attendants, the quality and types of service, types of planes, and other fringe benefits to passengers. (p. 264)

The post-regulation era of airlines has been quite different, as both Vietor and Ball note. Ball quotes an anonymous letter from a flight attendant recently posted on the Internet:

> "We're sorry we have no pillows. We're sorry we're out of blankets. We're sorry the airplane is too cold. We're sorry the airplane is too hot. We're sorry the overhead bins are full.... We're sorry that's not the seat you wanted. We're sorry there's a restless toddler/overweight/offensive-smelling passenger seated next to you.... We're sorry that guy makes you uncomfortable because he 'looks like a terrorist....'"
>
> This sorry state of affairs ends with an admonition: "The glory days of pillows, blankets, magazines, and a hot meal for everyone are long gone. Our job is to get you from point A to point B safely and at the cheapest possible cost to you and the company."

Ultimately, as Vietor notes, the problem of excess capacity moved front-and-center. In the end, the airlines deregulated because the current structure no longer was affordable, and that meant

while more passengers would be able to fly more places for less money, they also would give up those benefits that once made air travel famous.

COMPETING FOR ATHLETES – AND DOLLARS

Collegiate athletic competition obviously differs from competition in the airline industry. First, airlines do not have "alumni" and boosters. Second, while there is brand loyalty in the airline industry, it does not compare to something like the rivalry between the University of Alabama and Auburn University, which have won BCS football titles in the past two years, respectively. The account of the Alabama fan who poisoned a number of old water oaks at Toomer's Corner in Auburn, where Auburn fans gather to celebrate team victories, after Auburn beat Alabama in football nicely portrays the intensity of collegiate rivalries ("Alabama Fan," 2013).

Third, because of the existing "brand loyalty" in collegiate sports, higher education institutions do not necessarily compete with each other for "customers." (One does not suddenly trade a lifelong loyalty to the University of Michigan to become a fan of the Ohio State Buckeyes as one might decide to stop flying Delta and start flying on Southwest.) Writes Mattingly (2011):

> Decisions about team loyalties are often made early in life and are resolutely defended over the years. You rarely hear of an Alabama fan suddenly deciding to go to the Tennessee or Auburn side, an LSU fan doing likewise and rooting for Ole Miss, or a Florida fan suddenly hunkering down and rooting for Georgia. It just doesn't happen.

Championships in college sports intensifies competition, especially in men's basketball and football, and "school pride" is not the only thing at stake. Humphries (2003) found that state universities that have a successful football season are likely to see increases in "state appropriations the following year." Even when there are payouts to all teams within a conference, a team that plays in a BCS bowl (or for the BCS championship) will receive millions of dollars in new revenue.

Several studies have positively linked alumni and booster giving to the university and the recent success of its athletic teams, including Baade and Sundberg (1996) and McCormick and Tinsley (1990). McCormick and Tinsley (1987) also found that applications for a college or university are likely to increase significantly after high-profile athletic successes, and that average SAT scores of incoming freshmen are likely to have a statistically significant increase.

For example, the University of Alabama has received benefits far beyond success in football since Coach Nick Saban arrived on campus in 2007. Alabama has won five collegiate national championships in the past 12 seasons, but also has seen increased success in about every measurable standard for the university. Walsh (2017) writes:

> Before Saban arrived, the school had already begun an enrollment push, topping 20,000 in 2003 (20,333), and reaching a then-record 23,878 for the 2006-07 academic school year. For that fall, it received 15,761 applications.
>
> For the fall of 2016, it received 42,802 applications. Enrollment was 37,665.

Walsh continues:

> Normally when a school significantly expands the quality of its student applications dips. That wasn't the case at Alabama. The average ACT score went from 24.2 in 2006 to 27.07 a decade later. The average GPA for the incoming freshmen rose from 3.4 to 3.69.
>
> The geographical makeup of the student body also has changed dramatically. In 2004, 72 percent of freshmen came from within the state. Just four years after Saban arrived the university had more students from out-of-state for the first time.
>
> That's a huge boon in the bottom line. In 2006, tuition was $4,864 in-state, $13,516 for those from somewhere else. Following a steady stream of tuition hikes, the latest announced just last month, it'll be $11,580 in-state, and $28,900 out-of-state for the 2017-2018 academic year. Room and board is another $13,224.

In other words, athletic success of a collegiate institution, at least in football or basketball, is likely to result in a better-qualified student body in the longer run and also better financial prospects. Thus, just as airlines once competed for comely flight attendants (Whitelegg, 2005), collegiate athletic programs will compete aggressively for those factors of production that can translate into success in the sports arena.

The fact that collegiate programs are limited in what they can offer prospective athletes means that two things are certain: cheating and competition for other factors that will lead to a team recruiting better athletes, and for those coaches that can put the collection of athletes together into a championship team. Because there already is a wealth of literature that deals with recruiting violations and "improper" payments to individual athletes, this paper looks at two other issues that are escalating in college sports: coaches' salaries and facilities.

Despite the fact that the U.S. economy has slowed since the recession of 2008, collegiate coaches' salaries continue to rise. Table 1 shows how increasing numbers of top collegiate football coaches are being paid a million dollars or more per year.

TABLE 1. PAY INCREASING FOR TOP COLLEGE FOOTBALL COACHES

2009	
At least $1 million	56
At least $2 million	25
At least $3 million	9
At least $4 million	3
2017	
At least $ 1 million	19
At least $ 2 million	19
At least $ 3 million	31
At least $ 5 million	6
At least $10 million	1

Source: USA TODAY research

Coaches' salaries hardly are the only way that collegiate athletic departments compete with each other for the services of the student-athlete, as the incentive structure within college sports also applies to facilities themselves. As a comparison with the regulated airlines, one sees that creating new facilities (or capacity) also was the way that airlines would compete outside the arena of price. Vietor (1990) writes:

> Nowhere was the hubris of regulated competition more evident. The CAB's view that capacity utilization was a managerial prerogative, independent of price and entry regulation, was myopic. It separated the economic links between the fir and the market-between price, capacity investment, market share, and earnings.
>
> Excess capacity was just the most perverse consequence of a hybrid regulation that prevented price competition, but not service rivalry. Carriers could maintain market share only by adding capacity (more frequent departures) and service. These costs drove up prices, which in turn weakened demand and resulted in lower capacity utilization. The utility-type rate making that tied fares to the weaker performers among diverse corporations also discouraged cost effectiveness. Pricing under regulation tended to bundle a variety of services into one or two simple packages that hid the real costs and left travelers with little choice about the number and level of services they could purchase.
>
> The effects of regulation on route structure and aircraft fleet were among the most important. By allocating routes piecemeal through individual certification proceedings, CAB regulation produced fragmented, politically stylized, point-to-point route systems. Although they provided convenient nonstop service, often to locations where maintaining that level of service made no economic sense, such route structures afforded air carriers none of the economies of scale or scope that would have been possible with a more integrated, centralized structure. (pp. 72-73)

Indeed, the building of new amenities such as academic centers for athletes (to ensure their academic eligibility), huge weight rooms, strength staffs, indoor football practice facilities, separate basketball practice arenas, stadium skyboxes and the like have an economic explanation tied to NCAA policies. (We must emphasize here that we are not endorsing payment for athletes or a change in NCAA governance; rather, we simply are pointing out the developments that have occurred because of the implementation of NCAA rules.)

The Knight Commission, which the NCAA directed to investigate the growth of college athletics, issued a report in 2009 entitled "College Sports 101," in which it wrote the following about the expansion of facilities:

> Recruiting costs remain a relatively small item in most budgets, accounting for only two percent of total departmental costs, according to the latest NCAA Revenue and Expenditures Report (Fulks, 2008). However, some argue that facilities construction should be considered a recruiting expense as different athletics programs woo 17- or 18-year-old high school seniors with the most lavish practice facility, shiniest academic study center or snazziest arena.

One of the more interesting examples of competition through facilities came when the University of Kentucky more than 40 years ago built a special dormitory just for its basketball team. The dorm had many of the features of a luxury hotel, including maid service. (Unlike many Division I universities which emphasize football, Kentucky is best-known for basketball and its coach, John Calipari, has salary and benefits that rival that of Alabama's Nick Saban, college football's highest-paid coach.) When the NCAA ended the practice of separate athletic dormitories, Kentucky then lost that particular advantage in recruiting.

Not all college teams play in new arenas. Duke University, which has won four NCAA championships under current coach Mike Krzyzewski, plays in Cameron Indoor Stadium, which was completed in 1940 and refurbished in the late 1980s (Duke University, 2005). However, Cameron is famous for having a "home-court advantage" and a boisterous (some might call it obnoxious) student body that stands the entire game and is strategically placed close to the arena floor. Duke, however, is not lacking for other facilities or spending for athletics (College Factual, 2019).

Like the airlines during the period of regulation, colleges are not above using feminine charms as a means to help recruit student athletes. The *New York Times* reported on December 8, 2009, that the NCAA was investigating the University of Tennessee for alleged infractions involving its "hostess" program (Thamel, 2009). (At the present time, NCAA has not ruled on any of its findings in that investigation).

EXPANDING ON NON-PRICE COMPETITION

That non-price competition would be intense and reach multi-million-dollar levels in collegiate sports should not be surprising, the academic mission of higher education notwithstanding. The question is how athletic program engage in competition.

The NCAA may forbid its athletes from receiving monetary payment in the name of purity, amateurism, or academic integrity, but this does not prevent the *compensation* of athletes. In order to access the compensation of NCAA athletes we must first deal with money on a conceptual basis. Although the literal and physical transfer of money to athletes as a form of athletic compensation may be prohibited, this is not to say that the concept money fulfills is not or is impossible to be used within the NCAA for athletic compensation. Money is simply a tool used to gauge exchange but is not the only tool with the ability to initiate exchange.

CONCLUSION

As noted in our introduction, many people have complained about the "arms race" at NCAA institutions for new facilities and escalating coaches' salaries, with such actions often portrayed as the result of misdirected institutional priorities. We have demonstrated through both reference to previous economic studies and anecdotal evidence, however, that such actions are the rational response to the governing structure of the NCAA and the fact that successful sports teams can have a positive effect both in the raising of institutional revenues (including revenues outside of athletics) and increasing the numbers of applications for the incoming freshman class.

Furthermore, the actions of institutions of higher learning can be compared to the actions of U.S. airlines before they were deregulated in 1978, as airlines had their own "arms race" competition on the basis of facilities, since competition for customers by price was illegal. We find that this comparison contains explanatory power when applied to what is happening currently with collegiate athletics, and that when seen from this perspective, the behavior of college administrators is rational.

Although we have not engaged in empirical research, depending instead upon other empirical studies and anecdotal evidence, a comparison of collegiate athletics to professional sports – in which the athletes are paid, and many highly-so – is in order to see if different patterns from what we see in college athletics have developed regarding the building of facilities and the salaries of professional coaches. Just as the incentive structures changed for airlines after deregulation, one might expect to see different patterns emerging in professional sports.

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