

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
OAKLAND DIVISION**

IN RE: NATIONAL COLLEGIATE ATHLETIC
ASSOCIATION ATHLETIC GRANT-IN-AID
CAP ANTITRUST LITIGATION

Case No. 4:14-md-02541-CW
Case No. 4:14-cv-02758-CW

DIRECT TESTIMONY OF DR. ROGER G. NOLL

1. My name is Roger G. Noll, and I reside in Palo Alto, California. I am Professor *Emeritus* of Economics at Stanford University and Senior Fellow at the American Antitrust Institute. My educational background includes a B.S. in mathematics from the California Institute of Technology and a Ph. D. in economics from Harvard University.

2. My primary field of research is industrial organization, which includes the study of specific industries and the economics of antitrust. I am the author or co-author of approximately 400 publications, including two books and many scholarly articles on the economics of sports and a book on the economics of American universities. Among my honors and awards are the Alfred E. Kahn Lifetime Achievement Award from the American Antitrust Institute and the Economist of the Year Award from the *Global Competition Review*. My complete professional history and list of publications are contained in my *curriculum vita*, which is attached as Exhibit 168(a) of this testimony.

3. I have been an economic expert in other antitrust cases, including four previous cases involving the NCAA: *Board of Regents of the University of Oklahoma v. NCAA*, *Metropolitan Intercollegiate Basketball Association v. NCAA*, *Jason White, et al., v. NCAA*, and *In Re: NCAA Student-Athlete Name and Likeness Licensing Litigation*. Exhibit 168(b) lists the antitrust cases in which I have participated that are still in process or that were completed in the last five years.

TOPICS OF DIRECT TESTIMONY

4. This written direct testimony sets forth and explains the opinions that I expressed in my prior declarations¹ in this matter on three issues. (1) Does the evidence presented by the defendants establish that the popularity of FBS football and Division I basketball depends on keeping the amount of financial support that class members may receive at or below the cost of attendance (COA) (the so-called “amateurism” defense)? (2) Does the evidence presented by the defendants establish that the integration of class members into academics and other aspects of campus life requires keeping the amount of compensation and benefits that these athletes receive at or below COA? (3) Assuming that these defenses have merit, could the popularity of college sports and the integration of college athletes into campus life be maintained in a substantially less restrictive system than the current nationwide NCAA rules restricting compensation and benefits for class members?

5. In the process of writing this testimony, I have reviewed the complaints, my prior declarations, and the reports of defendants’ economic experts, Professor Kenneth Elzinga² and Professor James Heckman.³ I also have read the defendants’ submissions on summary judgment and exclusion of experts,⁴

1. *Reply Declaration of Roger G. Noll on Class Certification*, June 26, 2015 (henceforth *Noll Reply*) and *Declaration of Roger G. Noll*, May 16, 2017 (henceforth *Noll Declaration*).

2. *Expert Report of Kenneth G. Elzinga*, March 21, 2017 (henceforth *Elzinga Report*), *Rebuttal Report of Kenneth G. Elzinga*, May 16, 2017 (henceforth *Elzinga Rebuttal*), and *Reply Report of Kenneth G. Elzinga*, June 21, 2017 (henceforth *Elzinga Reply*). This testimony references the reports submitted by Professor Elzinga because I understand that the court has not yet decided whether or to what extent to permit Professor Elzinga to testify.

3. *Expert Report of James J. Heckman*, March 21, 2017 (henceforth *Heckman Report*), and *Rebuttal Report of Professor James J. Heckman*, June 21, 2017 (henceforth *Heckman Reply*).

4. *Defendants’ Notice of Motion and Motion for Summary Judgment and for Exclusion of Expert Testimony, and Opposition to Plaintiffs’ Motion for Summary Judgment; Memorandum of Points and Authorities in Support Thereof*, September 29, 2017 (henceforth *Defendants’ Summary Judgment Motion*), and *Reply in Support of Defendants’ Motion for Summary Judgment, Reply in Support of Defendants’ Motion to Exclude Expert Testimony, and Opposition*

the court's summary judgment order,⁵ and the court's order on the exclusion of expert testimony.⁶ Finally, I have reviewed documents and publications that have become available since my previous declaration in this matter that contain additional information that is relevant to the analysis and conclusions that I set forth in my two prior declarations. This material is referenced in the footnotes of this testimony.

6. In preparing this direct testimony, I have been assisted by economists at OSKR.

SUMMARY AND CONCLUSIONS

7. The two principal conclusions of this testimony are as follows.

8. First, defendants have not presented any reliable economic evidence to support their claim that the NCAA's current restrictions on the compensation of college athletes generate procompetitive benefits. Indeed, the evidence shows that the 2015 rule changes propelled the compensation of most FBS college athletes who receive athletic scholarships to participate in FBS football or Division I basketball beyond an amount that is consistent with the NCAA's own definition of amateurism. Nevertheless, since these rule changes, neither the popularity of these college sports nor the academic achievement of college athletes in these sports has suffered.

9. Second, the goals implied by defendants' alleged procompetitive benefits can be achieved at least as effectively in other, less restrictive ways. One less restrictive alternative is to allow each conference to set its own rules regarding the compensation of athletes. Another less restrictive alternative is for the NCAA to prohibit only additional compensation above COA that is unrelated to educational expenses or participation in academic activities and to promulgate new NCAA rules that allow additional

to Plaintiffs' Motion to Exclude Expert Testimony, December 8, 2017 (henceforth *Defendants' Summary Judgment Reply*).

5. *Order Granting in Part and Denying in Part Cross-Motions for Summary Judgment*, March 28, 2018.

6. *Order on Motions to Exclude Proposed Expert Testimony*, April 25, 2018.

compensation for academic achievement and other costs of college that are not part of COA.

10. This section summarizes the basis for these conclusions, and subsequent sections present the economic analysis that supports them.

11. The defendants' arguments that the current restrictions on the compensation of college athletes deliver procompetitive benefits are based on three false premises. Moreover, these false premises are assumed to be valid by the defendants' economic experts, thereby rendering their analysis of the economic effects of the NCAA's restrictions incorrect and unreliable.

12. The first incorrect assertion by defendants is that the NCAA always has adopted and enforced essentially the same rules and policies with respect to the compensation of college athletes, and recent changes in the rules regarding such compensation, including raising the cap on athletic scholarships to COA, are minor tweaks. In fact, the NCAA opposed but did not prohibit the very existence of athletic scholarships during its first fifty years, did not adopt an enforceable cap on athletic scholarships until 1957, and adopted changes in compensation rules in 2015 that increased the amount that most scholarship athletes receive by several thousand dollars in unencumbered and unmonitored spending money.

13. The second false premise on which the defendants and their economic experts base their arguments is the claim that the new rules that were adopted in 2015 adhere to the NCAA's standard for being an amateur, which is that compensation for scholarship athletes is restricted to the costs of attending college and participating in college sports, plus modest prizes for members of teams that do especially well, such as appear in a bowl game or make the Final Four of the national basketball tournaments. In fact, the rules that were adopted in 2015 allowed colleges to increase the value of an athletic scholarship substantially above the amounts that were expected. Consequently, the new rules created a situation in which most athletes who have a full athletic scholarship receive compensation that substantially exceeds the NCAA's own definition of amateurism.

14. Third, the defendants and their economic experts mischaracterize the relief that the plaintiffs seek and the “but for” world that is contemplated in my economic analysis of the NCAA’s current restrictions on compensation of class members. Specifically, defendants and their economic experts persistently compare current NCAA rules and policies with a system in which no restrictions exist. In the latter regime, college athletics is organized like a professional minor league, with players who have no connection to a college being paid to play on a college team according to individually negotiated contracts. In fact, my analysis assumes that Division I colleges and conferences would continue to have rules and policies requiring that college athletes be students in good academic standing as well as other rules about scholarship terms and conditions.

15. One of defendants’ alleged procompetitive benefits is that the current restrictions enhance the popularity of college sports and, indeed, are essential to making college sports even feasible. Defendants’ economic experts have not presented any economic analysis that supports this claim. Professor Heckman simply assumes that this claim is true. Professor Elzinga accepts the testimony of defendants’ fact witnesses about the effect of compensation of athletes on demand without undertaking any economic analysis to test the validity of their assertions.

16. Economic evidence supports the conclusion that the NCAA’s current rules for limiting compensation of athletes are not necessary to maintain the popularity of college sports. First, college football and basketball became widely popular and commercially successful before the NCAA even attempted to enforce restrictions on the compensation of athletes. During this earlier period, athletes at some colleges could and did receive compensation from third parties and held campus jobs without limits on their total compensation. Second, the compensation rules adopted in 2015 propelled the compensation of many college athletes, especially at most FBS schools, far above any plausible estimate of COA plus participation in sports. Meanwhile the revenues of college sports continue to increase. Third, the NCAA

uncovers several cases per year in which college athletes receive impermissible benefits (compensation in excess of the new limit), yet the evidence indicates that these examples of what defendants regard as violations of their principle of amateurism have not adversely affected the demand for college sports.

17. Another alleged procompetitive benefit is the claim that the cap on compensation of athletes undermines the integration of athletes into campus life, including their academic performance. Defendants' economic experts provide absolutely no evidence that this claim is true other than similar but unsubstantiated assertions by NCAA and university executives.

18. The economic evidence is not consistent with defendants' claims about the integration of athletes into college life. First, defendants' arguments are inconsistent with the fact that after the substantial increase in compensation of athletes in 2015, the academic performance of college athletes in Division I, including football and basketball players, improved, belying the claim that increasing compensation for athletic participation would cause athletes to switch time and effort from academics to athletics. Second, some college students are professional athletes who remain integrated into campus life despite earning far more than the NCAA's current compensation cap. Third, the evidence about academic policies at some Division I schools indicates that the defendants' commitment to the academic success of college athletes is ambivalent at best. Some athletes have complained that they are not permitted to pursue preferred courses of study that create time conflicts with college sports, and athletes who have difficulty with academics are steered into courses (some fraudulent) to keep them eligible. The NCAA's record in enforcing its policy that college athletes be students who are making normal progress towards a degree is weak, as confirmed by the recent report of the NCAA's Commission on College Basketball.

19. The alternatives to the present system do not require converting college conferences to minor professional leagues. All of the relevant alternatives do not prohibit the NCAA from making and

enforcing rules and policies requiring that college athletes be students who satisfy reasonable standards for academic good standing.

20. One less restrictive alternative is for each conference independently to make and enforce its own rules regarding the compensation of athletes. This system was in place until 1957, and under this system, college football and men's basketball became widely popular and commercially successful.

21. Another less restrictive alternative is for the NCAA to limit its restrictions on compensation above COA to cash payments that are unrelated to educational expenses or participation in academic activities and to adopt rules that alter the incentives facing athletes to promote the goals that are implied by the defendants' alleged procompetitive benefits. For example, the NCAA could adopt the rule that all scholarship athletes in FBS football and Division I basketball on the same team must receive the same compensation above COA related to educational expenses and that no additional cash compensation be based on individual athletic performance differences (other than existing participation benefits that the NCAA has already concluded do not damage their amateurism or integration objectives). The NCAA also could allow schools to provide additional benefits that are related to participation in academic activities, including cash payments and other rewards based on academic progress. This less restrictive set of restrictions would enhance competition for college athletes while directly promoting in a more effective way their academic success.

FACTUAL BACKGROUND

22. The defendants in this litigation assert that the NCAA's restrictions on the compensation of college athletes in FBS football and Division I basketball (henceforth class members) produce two procompetitive benefits: (1) enhancement of demand, and (2) greater integration of athletes into academic life. In arguing that the current restrictions on compensating class members provide these alleged procompetitive benefits,

the defendants make two incorrect factual assertions. The first is that the NCAA's rules and policies regarding payments to college athletes were designed to achieve these benefits and have been broadly similar throughout the history of the organization. The second is that current compensation for college athletes is limited to reimbursing athletes for the costs of obtaining a college education, with payments that exceed the COA limit being only minor exceptions.

23. These incorrect factual assertions are important because they have implications for detecting and quantifying the procompetitive benefits that the defendants allege and for identifying less restrictive alternatives to the current restrictions. Briefly, if for over a century the NCAA actually imposed more or less the same restrictions on the compensation of athletes, and if college athletes do not now and never have received compensation that exceeds a reasonable approximation of the cost of attending college, then historical and current empirical information could not be used to test whether the absence of enforceable NCAA rules about the compensation of college athletes, or the presence of compensation that exceeds COA, adversely affect the popularity of college sports or the integration of college athletes into academic life. Likewise, if defendants' claims were accurate, the historical record would not contain a real-world example of a less restrictive system for determining the compensation of college athletes that achieved the same procompetitive benefits (if any) as the present restrictions.

24. In reality, the NCAA's rules and policies about the compensation of college athletes have varied substantially over time. In some periods the NCAA has not enforced rules and policies that restrict compensation and benefits for college athletes to an amount less than or equal to a college athlete's cost of attendance. In other periods, stricter rules have been enforced and then, when relaxed, were found to have been unnecessary, invalidating the claimed justifications for those restrictions. Consequently, historical information can be used to shed light on whether the NCAA's procompetitive justifications for

its rules and policies are valid and to identify less restrictive alternatives from the past that did not undermine the popularity of college sports or the academic integration of college athletes.

25. This section of my testimony reviews the history and current status of NCAA rules and policies about compensating college athletes. Subsequent sections use this historical and current information to develop tests of the effects of significant changes in both these rules and the process for developing and enforcing them on the alleged procompetitive justifications that defendants have put forth. Finally, this historical and current information is used to identify less restrictive alternatives that are as effective as the current NCAA rules for maintaining the demand for college sports and integrating class members into campus life. My analysis in these sections also considers and evaluates the arguments of defendants' economic experts pertaining to alleged procompetitive justifications and less restrictive alternatives.

The NCAA's Changing Definition of Amateurism

26. The defendants' submissions in this litigation incorrectly assert that the NCAA's rules and policies regarding payments to college athletes have been essentially the same throughout the history of the NCAA.

For example, the opening paragraph of *Defendants' Summary Judgment Motion* states:

“For over a century, colleges and universities have come together as members of the NCAA to design and implement the rules for college sports. The central principle underlying those rules is that college sports are to be played by student-athletes, not paid professionals.”⁷

Subsequently in the same submission, the defendants characterize the variation in policies through history as minimal:

“[T]he NCAA has periodically tweaked existing rules regarding these items and enacted new rules to address the evolving needs of student-athletes and the circumstances they face. But the NCAA has always sought to ensure that the items permitted do not undermine the tradition of amateurism in

7. *Defendants' Summary Judgment Motion*, p. 1.

college sports, and so has limited the type and quality of awards, benefits, goods, and reimbursements that student-athletes can receive.”⁸

According to defendants, this long history of adherence to the principle of amateurism, as defined and implemented by the NCAA, is responsible for the “immense popularity” of college sports and serves to balance the demands of athletics and academics for college athletes.

“The NCAA’s rules represent its members’ ongoing efforts to balance these complementary aspects of a student-athlete’s education and ensure that college sports do not lose their unique appeal...”⁹

27. In reality, defendants’ assertion that the NCAA has pursued essentially the same policies to restrict the compensation and benefits of student-athletes for over one hundred years is incorrect. Indeed, the term “student-athlete” is not 100 years old, but was invented in the 1950s as part of a legal strategy to prevent federal and state governments from treating college athletes as employees and scholarships as wages.¹⁰ Moreover, the NCAA did not succeed in imposing enforceable rules restricting the compensation and benefits of college athletes until 1957.

28. The NCAA has always advocated that college athletes ought to be amateurs, but the definition of an amateur put forth by the NCAA has varied enormously over its history. During its first half-century, the NCAA defined amateurism as the absence of *any* financial aid based on athletic participation or performance. The NCAA abandoned this definition of amateurism because many schools and conferences had successfully commercialized intercollegiate athletics despite having persistently refused to accept the

8. *Ibid.*, p. 28.

9. *Ibid.*, p. 1.

10. Robert A. McCormick and Amy Christian McCormick, “The Myth of the Student-Athlete: The College Athlete as Employee,” *Washington Law Review* Vol. 81, No. 1 (February 2006), pp. 71-158. (“The history of the NCAA’s extraordinary and continuing effort to mask the true nature of the university-athlete relationship bears exquisite witness to its purpose in inventing the term ‘student-athlete’” [p. 83].)

NCAA's then-asserted strict version of amateurism, and, as a result, the NCAA lacked the power to enforce compliance with its policy regarding compensation of athletes.

29. In 1957 the NCAA dramatically changed its definition of amateurism and, in the process, obtained authority to enforce new rules based upon this definition. The NCAA's definition of an amateur switched from being about whether athletes were paid anything at all to being about how much they can be paid. Thus, according to the NCAA's definition of amateurism that persisted from 1906 until 1956, all scholarship athletes since 1957 have been professionals.

Amateurism in the NCAA's First Half Century

30. The historical development of the NCAA's amateurism rules and policies is as follows. The Intercollegiate Athletic Association of the United States (IAA), which became the NCAA in 1910, was created in 1906 to deal with violence in intercollegiate sports by adopting "rules relating to roughness, holding, and foul play."¹¹ Early on, the IAA advocated a rigid definition of amateurism in college sports. The IAA's version of amateurism precluded recruiting ("proselytizing") athletes and awarding scholarships that were based on athletic ability.¹² These policies had received tacit support from many colleges since the 1880s but were not followed by most colleges that pursued athletics at the highest level.¹³ Although the IAA's eligibility standards included adherence to its rigid definition of amateurism,

11. George H. Hanford, "Controversies in College Sports," *Annals of the American Academy of Political and Social Science*, 445 (1979), pp. 66-79 at p. 68.

12. Virginia A. Fitt, "The NCAA's Lost Cause and the Legal Ease of Redefining Amateurism," *Duke Law Journal* 59(3) (December 2009), pp. 555-93 at pp. 560-61. This article extensively cites Kay Hawes, "Debate on Amateurism Has Evolved over Time: Association Prepares for Another Round of Talks on the Issue at 2000 Convention," *NCAA News*, January 3, 2000, but the NCAA's web address that Fitt cites no longer works and I am unable locate the Hawes article.

13. Howard J. Savage, *et al.*, *American College Athletics*, Bulletin No. 23, Carnegie Foundation for the Advancement of Teaching, 1929, Chapter II.

this standard was not a rule, but was a guideline that was not enforced. Acceptance of this standard by a college was not a requirement for membership in the NCAA and participation in NCAA sports was not restricted to students who received no compensation for being college athletes. Some conferences that participated in big-time football (by far the most popular college sport in this era) periodically attempted to enforce strict amateurism rules during the first 50 years of the NCAA's existence, but typically these periods were short lived. Until 1957, most schools that tried to compete in college sports at the highest level actively recruited athletes and paid them through combinations of scholarships, on-campus jobs, and assistance from third parties.¹⁴

31. Although the IAA adopted the amateurism standard that college athletes should not receive any compensation for participating in sports, its members did not adhere to the IAA's standard. As a result, from the origin of the IAA until after World War II, conferences adopted their own rules about the amount of financial assistance that could be given to a student for participating on a college athletic team, and colleges that did not belong to a conference, or that were members of a conference that lacked financial aid rules, made up their own policies about the compensation of their athletes. This system of decentralized rule making by conferences and individual colleges, persisted until 1956.

32. In the 1920s, the Carnegie Foundation sponsored a study of intercollegiate athletics, and their third report examined the extent to which the NCAA's principles of amateurism were followed by its members.¹⁵ This report found that intercollegiate sports, especially football, had become commercialized and that participation in commercialized sports had become a vocation, not an extracurricular activity.¹⁶

14. *Ibid.*

15. *Ibid.*

16. "The college athlete, often a boy from a modest home, ... begins to live on a scale never before imagined. A special table is provided. Sport clothes and expensive trips are furnished

Specifically, the report found that recruiting and paying athletes was commonplace,¹⁷ with payments often coming from individuals and groups working independently from, and sometimes without the knowledge of, the college.¹⁸

33. Nevertheless, in the 1920s college sports, especially football, were extremely popular and commercially successful, even though violations of the NCAA's rigid definition of amateurism were rampant. For example, in 1924 more than 100,000 fans attended the game between California and Stanford; Army, Harvard and Pennsylvania each played three games in which attendance exceeded 50,000; Michigan averaged over 32,000 fans over its eight-game schedule; and for the first time total attendance for college football exceeded 10 million.¹⁹ By comparison, total college football attendance did not exceed 20 million until 1960.²⁰

34. Notwithstanding the widespread acceptance among its members of compensation of athletes that was conditional on athletic participation,²¹ the NCAA continued to advocate its strict definition of

him out of the athletic chest. He jumps at one bound to a plane of living of which he never before knew, all at the expense of some fund of which he knows little." *Ibid.*, p. xiv.

17. *Ibid.*, Chapter X. Of the 112 institutions that were studied, 81 reported providing some form of subsidy to athletes (p. 241). "The recruiting of American college athletes... has reached the proportions of nationwide commerce... The element that demoralizes is the subsidy, the monetary or material advantage that is used to attract the schoolboy athlete. It is seldom lacking in the general process of gathering 'a winning team'" (p. 240).

18. *Ibid.*, p. xv. For example, at 39 of the 112 institutions that were studied for the Carnegie report, alumni groups actively participated in paying athletes (p. 241).

19. "Many Records Set in Football Season," *New York Times*, December 7, 1924, at: <https://www.nytimes.com/1924/12/07/archives/many-records-set-in-football-season-game-reached-new-heights-of.html>.

20. *NCAA Football Attendance Records*, NCAA (2010), at: http://fs.ncaa.org/Docs/stats/football_records/DI/2010/Attendance.pdf.

21. In 1980, the NCAA collected historical information about financial aid policies between 1930 and 1950. ("Evolution of College Athletic Financial Aid Regulations: Conference Rules 1930-1950," NCAA, 1980, Bates No. NCAAGIA00045494-508.) This report found that most conferences provided athletic scholarships during this period, although the details varied enormously both among conferences and within the same conference over time.

amateurism – no payments of any kind based on athletic participation – for nearly 50 years. In 1939, the NCAA issued its “Declaration of Sound Principles and Practices for Intercollegiate Athletics.” One principle was that aid had to be given through the same process as scholarships for other students, without special set-asides of aid for athletes, which is essentially the same policy that is still followed by the Ivy League. Another principle was that aid could not be based on athletic participation and could not be withdrawn for failure to participate. Still another principle was that athletic department funds could not be used for any form of aid other than employment that involved full and honest effort. Athletes could be employees, but only if they were paid the going wage for jobs that they actually performed. But adherence to these principles was voluntary – eligibility to participate in NCAA sports did not require that schools and athletes actually behave according to these principles.

35. The NCAA formally attempted to enforce its strict definition of amateurism on its members with its adoption of the “Sanity Code” in 1948.²² The Sanity Code required that grants to cover tuition and fees had to be based on financial need, calculated in the same way as other need-based scholarships. Additional aid to cover room and board had to be provided through employment on campus, and aid based on scholarship and other non-athletic factors was unlimited as long as it was available to other students. The Sanity Code included the 1939 “Declaration of Principles,” but allowed athletes to receive medical care, training table, and other meals on sanctioned trips in addition to need-based grants. In response to widespread violations of these rules, the NCAA dropped the Sanity Code three years later, returning “control and responsibility for conduct of athletes on the institutions or their conferences.”²³

22. “Colleges Adopt the ‘Sanity Code’ to Govern Sports,” *New York Times*, January 11, 1948, at <https://www.nytimes.com/1948/01/11/archives/colleges-adopt-the-sanity-code-to-govern-sports-ncaa-bans.html>.

23. “N.C.A.A. Drops Sanity Code Control of Financial Aid to Athletes,” *New York Times*, January 13, 1951, at <https://www.nytimes.com/1951/01/13/archives/ncaa-drops-sanity-code-control-of-financial-aid-to-athletes.html>.

36. The significance of this history of the NCAA is that the NCAA did not enforce restrictions on the compensation of college athletes for the first fifty years of its existence. Yet during this period, college football and basketball as organized by the same colleges that now are members of Division I became immensely popular.

Abandonment of the Strict Version of Amateurism

37. After abandoning the Sanity Code, the NCAA began to adopt rules to restrict, rather than to eliminate, compensation of college athletes. In 1952, the NCAA adopted a rule that prohibited financial aid to athletes from anyone other than the college or the persons for whom the athlete is a legal dependent.²⁴ This rule cut off aid from third parties, a major source of pay for college athletes that was documented in the Carnegie Report. In 1956, the NCAA again banned all financial aid that was based on participation or performance in a sport. That is, in 1956, the NCAA labeled an athlete as a professional if the athlete received a scholarship of any amount that hinged on participation in athletics (which is the type of scholarship that college athletes receive today²⁵).

38. The next year the NCAA gave up the battle to ban compensation that is conditioned on athletic participation and, in so doing, promulgated an entirely new definition of amateurism. In 1957, the NCAA adopted rules that limited athletic financial aid (including employment) to commonly accepted educational

24. In 1953 the NCAA exempted from this rule outside financial aid that was not based on athletic ability, thereby permitting college athletes to receive academic scholarships that were awarded by entities other than a college.

25. Although Wake Forest president Nathan Hatch testified that an athletic scholarship should be thought of as a “gift,” he also testified that a scholarship athlete who chose to give up sports to focus exclusively on academics would lose the scholarship. *Deposition of Nathan O. Hatch*, May 11, 2017, pp. 37-39.

expenditures, or approximately what is now called COA.²⁶ This cap was defined as the sum of tuition, fees, books, other educational supplies, room and board, and \$15 per month for incidental expenses (often called “laundry money”). Thus, after a half-century of futilely advocating a pristine version of amateurism, the NCAA changed its definition to allow college athletes to receive compensation that is conditioned on their participation in intercollegiate athletics.

39. Since 1957, while vigorously enforcing its amateurism rules, the NCAA has adopted numerous changes in the amount and nature of compensation and benefits that student athletes can receive. In so doing, the NCAA has created a situation in which amateurism is defined as providing compensation that does not exceed whatever the NCAA at the moment asserts that the limit ought to be, but these ever-changing definitions do not adhere to any consistent principle over time.

40. In the 1960s, the NCAA changed its definition of amateurism in several ways.

(1) The NCAA set limits on earnings from employment of athletes by the university. The previous rule had been that a college athlete could be paid for genuine work at standard pay rates without further restrictions.

(2) For the first time, the NCAA prohibited athletes from using their “fame or reputation” to earn income. Previously athletes could receive pay for appearances at non-athletic activities. Although earnings from appearances were not consistent with the NCAA’s original definition of amateurism, prohibition of these activities was not enforced by the NCAA until the 1960s.

(3) Reimbursement of travel costs was limited to “actual and necessary” expenditures. Schools no longer were allowed to give athletes a stipend for travel expenses.

26. The main difference between current COA and in the 1957 cap was that in the former miscellaneous expenditures are calculated separately for every school and athlete, while in the latter this item was the same for all schools and athletes.

(4) Limits were placed on the number of complimentary tickets to games that athletes could be given.

(5) For the first time, the NCAA explicitly permitted colleges to provide some additional benefits that were not related to COA, such as health insurance.

41. In 1976, the NCAA once again made a financially significant change to its definition of amateurism by modifying the definition of “commonly accepted educational expenditures” to exclude course-related supplies, travel to and from college, and other incidental expenses, including laundry. This change created the difference between the so-called grant-in-aid (“GIA”) cap (the limit on the value of a scholarship from 1976 until 2015) and COA (roughly the limit in force from 1957 until 1976).

42. Since 1976, the NCAA frequently has changed where the line is drawn between permissible and impermissible compensation of college athletes. One type of change has been variation in the extent to which college athletes can receive compensation for educationally related expenses. For example, NCAA President Mark Emmert testified that a 2011 proposal to pay athletes a stipend for living expenses above the GIA cap (i.e., a miscellaneous expense allowance, or “MEA”) was adopted but then quickly repealed because the NCAA claimed to fear that pay above the GIA cap would constitute “pay-for-play” and reduce the popularity of college sports.²⁷

43. In early 2014 the most successful conferences in FBS (the “Power Five”²⁸) plus independent Notre Dame proposed that they be given the authority to make their own rules on many issues, including to raise

27. *Deposition of Mark Emmert*, January 12, 2017, (henceforth, *Emmert Deposition*), pp. 134-137.

28. Atlantic Coast (ACC), Big Ten, Big 12, Pac-12, and Southeastern Conference (SEC). Since the end of World War II, the only school to win the NCAA national championship in football that was not a member of one of these conferences or Notre Dame was BYU in 1984. At the time of the *O’Bannon* litigation, the Big East also was regarded as a power conference in football, although its football playing members left the conference a year later.

the cap on an athletic scholarship to COA. This proposal was approved by the NCAA Board of Directors in August of 2014.²⁹ The Power Five plus Notre Dame then approved adoption of multi-year COA athletic scholarships in January of 2015, which other Division I schools and conferences could elect to adopt as well.³⁰ Thus, in 2015 the NCAA's cap on the value of an athletic scholarship returned to roughly the cap that was imposed between 1957 and 1976.

44. The second type of change in allowed compensation pertains to benefits that are not part of a standard athletic scholarship. The NCAA's definition of amateurism has changed numerous times in the past two decades through new rules to allow additional payments from the NCAA's Student Assistance Fund (SAF), additional compensation that is "incidental to participation," and additional stipends from the federal government (Pell Grants), as discussed in the next section. These additional sources of payments and benefits are extremely important. Because compensation from these sources is in addition to a COA scholarship, the COA limit is not a bright line cap on total compensation and benefits to class members. As discussed elsewhere, additional compensation above COA has not adversely affected the popularity of FBS football or Division I basketball or the integration of class members into campus life.

Implications of the Changing Definition of Amateurism

45. The NCAA's original but unenforced definition of amateurism, in place from 1906 to 1956, was that an amateur is a person who engages in athletics purely for the experience of participating with no prospect of financial gain and no financial aid that was conditioned on athletic participation. Because the NCAA did not enforce this principle, the actual rules governing financial aid were developed and enforced

29. Brian Bennet, "NCAA Board Votes to Allow Autonomy," *ESPN* at http://www.espn.com/college-sports/story/_/id/11321551/ncaa-board-votes-allow-autonomy-five-power-conferences.

30. Michelle Brutlag Hosick, "Autonomy Schools Adopt Cost of Attendance Scholarships," *NCAA Press Release*, January 18, 2015, at <http://www.ncaa.org/about/resources/media-center/autonomy-schools-adopt-cost-attendance-scholarships>.

by conferences or individual colleges. Under the rules actually in place, many college athletes could and did receive payments (including from employment, appearances, and third parties) that not only violated the strict principle of amateurism that the NCAA enunciated at the time, but that was not capped by COA. Thus, not only were scholarship athletes not amateurs by the NCAA's older, stricter standard before 1957, many were not amateurs even by the current standard in that their compensation was not capped by COA.

46. The NCAA abandoned its more rigid definition of amateurism in 1957 and also acquired the authority to enforce its new definition as an eligibility requirement for college athletes. Since 1957, the NCAA has defined amateurism as being paid no more than is allowed under an ever-changing and ever-more-complex set of regulations regarding permissible payments and other benefits. That is, the NCAA has adopted the Humpty Dumpty standard from *Through the Looking Glass*: “‘When I use a word,’ Humpty Dumpty said, in rather scornful tone, ‘it means what I choose it to mean – neither more nor less.’” The most recent example is the move to COA, which the NCAA rejected in 2011 (in the form of MEA) as “pay-for-play” professionalism but then adopted soon thereafter (in 2015) as consistent with the NCAA's newest definition of amateurism.

47. Former NCAA Executive Director Walter Byers acknowledged the Humpty Dumpty standard when he observed that the NCAA's elusive concept of amateurism is a “modern-day misnomer for economic tyranny” and “a transparent excuse for monopoly operations.”³¹ College athletes who receive athletic scholarships have never been amateurs according to the NCAA's original definition of the term and today can be and frequently are compensated by more than any plausible definition of the cost of attending college. Since 1957 the NCAA's compensation rules have not been tethered to any coherent or consistent definition of amateurism.

31. Walter Byers with Charles Hammer, *Unsportsmanlike Conduct*, University of Michigan Press, 1995, at pp. 347, 388.

Cost of Attendance and the Compensation of College Athletes

48. Since 2015 NCAA rules have capped the value of an athletic scholarship at cost of attendance. All schools in the Power Five conferences plus Notre Dame moved to COA scholarships in 2015. Members of all of the other FBS conferences are allowed to adopt the COA cap as well, and most but not all have chosen to do so.³²

49. Defendants explain the COA cap as follows. “COA is a defined amount that each college and university calculates, based on federal regulation, to reflect what it costs an individual student to attend that particular school.”³³ According to defendants, the stipends that are part of a COA scholarship “are calculated by reference to a federal statute that measures the expenses associated with college attendance.”³⁴ Defendants acknowledge that COA varies among colleges, but state that for each school “the COA amount that a student-athlete may receive must be calculated in the same manner as for all other students at his or her school.”³⁵ Professor Elzinga asserts that COA is educational costs: “School and conference officials are concerned that scholarship amounts should cover educational expenses, but not provide financial aid to college athletes that is not directly related to the cost of attending school.”³⁶

50. Defendants claim that the COA cap on an athletic scholarship amounts to a line in the sand – the

32. In the settlement of the damages case in this litigation, 264 Division I schools had provided or had announced their intention to provide COA scholarships as of June 1, 2017. See <http://www.grantinaidsettlement.com/coa-schools.aspx>.

33. *Defendants’ Summary Judgment Motion*, p. 7.

34. *Defendants’ Summary Judgment Reply*, p. 15. The quoted statement is inaccurate. Neither the statute nor the guidelines for implementing it “measure” anything. Instead, the statute and guidelines instruct schools on how to calculate COA, as explained below.

35. *Defendants’ Summary Judgment Motion*, p. 7.

36. *Elzinga Report*, p. 83.

“Not One Penny” standard – that separates amateurs from professionals. According to NCAA President Mark Emmert, the NCAA adheres to a “philosophical principle that the universities decided on a long time ago” that college athletes must not be “reimbursed for those activities other than ... the costs associated with being a student.”³⁷ The NCAA’s former Executive Vice President stated that “as absurd as [it] may sound” a payment of even a penny over cost of attendance would transform amateur athletics to professional sports.³⁸ American Athletic Conference Commissioner Michael Aresco “absolutely” agreed that “any dollar amount above calculated cost of attendance would harm amateurism.”³⁹ And, according to Professor Elzinga, “if student-athletes receive even very small payments—a penny—that isn’t related to their educational expenses, then the payment is a damaging breach of amateurism.”⁴⁰

51. The Not One Penny standard is consistent with the NCAA’s long record of punishing schools and athletes for even small unauthorized benefits.⁴¹ For example, a Stanford football player who rented an apartment for the summer to remain on campus was found to have received \$400 in impermissible benefits from his landlord, consisting of meals, movies, use of a vacation home, and a short-term loan (repaid) to

37. *Emmert Deposition*, pp. 61-62.

38. *Deposition of Mark Lewis*, January 31, 2017 (henceforth *Lewis Deposition*), pp. 220-221.

39. *Deposition of Michael Aresco*, November 16, 2016 p. 247.

40. *Elzinga Report*, p. 97.

41. The NCAA categorizes rule violations into four levels according to severity. Level I violations include “a substantial or excessive impermissible benefit,” Level II violations cover “more than a minimal... impermissible benefit,” and Level III violations include “a minimal impermissible benefit.” See <http://www.ncaa.org/about/resources/media-center/news/new-violation-structure>. The boundaries between levels are not explicitly defined. Levels I and II violations can lead to post-season bans, financial penalties, and reductions in scholarships. See https://www.ncaa.org/sites/default/files/Att2_Penalty%2BGuideline%2BMatrix%2B%28Version%2B%29_101212.pdf.

buy a bicycle. The player's punishment was a fine of \$400 and loss of eligibility for one game, while Stanford was fined \$5,000.⁴²

52. Assuming for the sake of argument that benefits directly related to the cost of attending school constitute a defensible distinction between an amateur and a professional, that line of demarcation does not explain the NCAA's current rules about permissible benefits to athletes. The NCAA does not limit compensation to expenditures that are "directly related to the costs of attending school."⁴³ Today the NCAA permits athletes to receive numerous payments and other benefits in addition to COA, including many forms of compensation that are based solely on athletic participation and are not connected to educational activities.

53. Defendants assert that the compensation in excess of COA is limited to benefits related to participation in athletics that have been available for a long time: "the NCAA has long permitted student-athletes to receive certain non-cash awards, benefits, and expense reimbursements related to their participation in athletics, recognizing that athletics are also part of a student-athlete's educational

42. "Stanford Guilty of 'Major' NCAA Violations for First Time," *Los Angeles Times*, September 15, 2016, at <http://www.latimes.com/sports/more/la-sp-stanford-ncaa-violations-20160915-snap-story.html>. The \$5,000 fine was for this violation plus a violation of the rules on limits to practices by the softball coach.

43. In *Jason White, et al., v. NCAA, et al.*, NCAA witnesses stated that moving to the amount of compensation of college athletes to COA would violate the principles of amateurism for this reason. For example, NCAA expert Professor Jerry Hausman stated that some components of the COA gap were "not as closely tied to the costs of a college education (e.g. laundry money or other personal expenses, which would be incurred regardless of whether a person is in or out of college are also more subjective and less well-defined)," and from this he concluded that "the COA Rule would introduce discussions of the amount of compensation" into recruiting, "which would in turn harm the concept of amateurism." *Expert Report of Professor Jerry A. Hausman*, September 6, 2007, p. 30. Professor Thomas Kane also explained that COA included components that were "not educational services." *Expert Report of Thomas J. Kane (White)*, September 6, 2007, p. 15. The NCAA asserted that keeping the GIA cap below full COA was needed to "prevent pay-for-play." *NCAA's Memorandum of Points and Authorities in Support of Summary Judgment or, in the Alternative, Partial Summary Judgment*, October 22, 2007, p. 40.

experience, that student-athletes should be able to participate in competition without having to bear the built-in costs, and that they should be allowed to receive certain awards recognizing athletic success.”⁴⁴ Thus, according to the defendants, the cap on compensation of college athletes is COA plus the costs of participating in sports plus modest awards for athletic accomplishment.

54. Defendants’ characterization of the nature and scope of allowed compensation of college athletes is inaccurate. Since 2015, the compensation of many FBS football players and Division I basketball players – and at many schools, a majority of such players – exceeds COA by a substantial amount (much more than one penny). The NCAA’s current rules allow compensation that substantially exceeds the costs of college attendance and athletic participation in two ways.

55. First, while costs associated with receiving a college education enter into calculating COA, part of the compensation that a scholarship athlete receives is a cash stipend that can be and is spent on goods and services that are not directly related to obtaining an education and that would be incurred if the scholarship recipient were not enrolled in college. Moreover, once the NCAA allowed athletic scholarships equal to COA, many schools substantially increased their COA. As a result, the actual cash stipend that was given to college athletes with a full athletic scholarship was greater than had been anticipated before the scholarship cap was raised.

56. Second, scholarship athletes are allowed to receive substantial additional compensation above COA from several sources. This additional compensation falls into three categories: grants from the NCAA’s SAF and Academic Enhancement Fund, benefits that are “incidental to participation,” and financial aid for low-income students that is paid by the federal government (including Pell Grants). Each category includes items that are not directly related to the costs of attending school and participating in

44. *Defendants’ Summary Judgment Reply*, p. 25.

college sports.⁴⁵ Many athletes who receive full COA scholarships, and most football and basketball players at some FBS schools, also receive thousands of dollars of additional compensation from these other sources and so are professional athletes according to the NCAA's definition of amateurism.

Calculation of COA

57. COA is the maximum amount that a full-time student can receive from federal programs that subsidize college attendance, including Pell Grants. The federal government issues annual guidelines for calculating it.⁴⁶ COA covers three types of expenditures. The first type is direct educational expenditures, including tuition, fees, books and supplies, as well as the costs of a job that is part of a course of study and of a professional license in a program that prepares a student for an occupation that requires one.⁴⁷ The second type includes costs of attending college that are not directly related to educational activities, such as transportation to and from campus and room and board for students who are living away from home. The third type covers ordinary living expenses that have nothing to do with attending college in that they would be incurred regardless of whether the student was enrolled.

58. COA varies among students at the same school. Some variation is due to differences in costs among academic programs, such as whether a student must buy special equipment or pay lab fees in specific majors and classes. Other sources of COA differences among students are not related to the cost of attending school, but instead are differences in living costs that depend on life circumstances. One

45. The NCAA also has several programs that provide grants to students (including various post-graduation scholarships and awards that are made on a competitive basis to some students). See <http://www.ncaa.org/about/resources/finances/student-athlete-benefits>.

46. *Federal Student Aid Handbook 2017-18*, U.S. Department of Education, 2016, Chapter 2, "Cost of Attendance," at <https://ifap.ed.gov/fsahandbook/attachments/1718FSAHbkVol3Chapter2.pdf>.

47. *Ibid.*, pp. 3-25, 3-37.

example is the allowance for room and board. For students who live in college dormitories, the allowance is the “standard amount normally assessed most residents,” and for students who live off campus, the allowance “must be based on reasonable expenses.”⁴⁸ A student who lives at home with parents receives an allowance that is determined by the college with no further guidance from the federal government, even though the cost of living at home is not affected by attending college. Another example is whether a student is a dependent or, if independent, has dependent children. The federal COA includes an allowance for child care for independent students who are parents.⁴⁹

59. Each college is responsible for calculating its COA according to the federal guidelines, and, as a result, COA for the same student can differ substantially among schools. One source of differences is variation in the prices that colleges charge, such as tuition, room and board. COA also can differ among schools because of differences in local living costs. As discussed below, these differences have led to substantial variation in the stipends that scholarship athletes now receive as part of their COA scholarship.

60. Once COA is calculated, students receive compensation in two ways. Some benefits, like tuition, room and board, are sometimes paid by paying the student a stipend to pay their rent and buy food, sometimes paid directly by the college to a private provider of off-campus housing, and sometimes paid as credits on the student’s bill upon registration. Some benefits are paid as monthly cash payments. How a student actually spends these stipends is neither based on actual expenditures nor monitored by the college. Because the amount that is paid is an estimated average expenditure, one would expect that the uses of these funds vary enormously among students and that these funds often are spent on items that are unrelated to being a student or an athlete.

48. *Ibid.*, p. 3-37.

49. “The amount of the allowance should be based on the number and age of such dependents and should not exceed reasonable cost in the community for the type of care provided.” *Ibid.*

61. Journalistic accounts of what students have done with these stipends support this expectation.

According to one account:

“Several said they used the money for additional groceries, school supplies, and other expenses that previously came out of their own pockets... Others spoke of returning income to home.... ‘Pretty much since I’ve been here I’ve been doing that ... able to help my mom and brother out a little bit more,’ said Kansas basketball player Jamari Traylor.”⁵⁰

According to another account of Traylor’s situation:

“Jamari Traylor... endured a year of homelessness on the streets of Chicago before finding his way to Lawrence. Traylor sent a portion of his COA money home to assist his mother, who still lives on the South Side, in paying her bills.”⁵¹

Another story reported:

“Justin Bibbs, a Virginia Tech basketball player from Dayton, Ohio, called the allowance ‘really helpful’ for items such as groceries and social activities... While Bibbs said he was cautious and that receiving the allowance in installments helps, surely many athletes splurged — hello, iPhone 7 — as soon as the money hit their accounts.”⁵²

62. Another account of COA expenditures that have no relation to education reports how a South Carolina player planned to spend his cash stipend.

“Last week, when South Carolina football players received their first monthly allocation of \$400, freshman wide receiver Jalen Christian was asked what he planned to do with it. ‘I don’t know yet,’ he said. ‘Save it up? I’m an Xbox guy

50. Blair Kerkhoff and Tod Palmer, “They’re not Paychecks, but Major College Athletes Got Extra Scholarship Stipends for First Time This School Year,” *Kansas City Star*, June 26, 2016, at <http://www.kansascity.com/sports/college/article86062792.html>.

51. Jason Kendall, “What If Kansas Paid Its Basketball Players? It Already Does, Sort of,” *Lawrence Journal-World*, July 24, 2016, at <http://www2.ljworld.com/news/2016/jul/24/what-if-kansas-paid-its-basketball-players-it-alre/>.

52. David Teel, “Cost-of-Attendance Allowances not Recruiting Nightmare Some Feared,” *Newport News Daily Press*, September 10, 2016, at <http://www.dailypress.com/sports/virginia-tech/dp-spt-teel-column-cost-attendance-year-20160910-column.html>.

and there are new games coming out in October and November. But, other than that, I'm going to save it.”⁵³

A similar story reported the reactions to the new COA stipend at national power Alabama.

“Johnson said what Alabama was offering might still be enough to get a car and pay insurance... Shaw said it might not matter in the long run how much he received because, ‘my mama’s going to have that account in her name.’”⁵⁴

Similarly, LSU’s star running back was quoted about how he spent his additional stipend.

“‘I went straight to Wal-Mart,’ said LSU sophomore tailback Leonard Fournette, who is helping support a young daughter... ‘I immediately paid my bills – rent, cable, phone – and bought groceries,’ he said. ‘And I saved some. Last year, it was not as much. So I still was able to go to my favorite Chinese place. It’s nice to be able to do that, and it’s good to have some extra money if you need more clothes. And I like to have the extra money in my savings just in case something pops up... I plan on getting some more massages, too. We get some here (at LSU’s football facility), but now I’ll be able to pay for an extra one.’”⁵⁵

63. These stories do not apply just to programs in Power Five conferences. Another story is about a school in a so-called “mid-major” conference.

“Coastal Carolina Women’s Basketball Coach, Jaida Williams: ‘I think it’s most beneficial because a lot of the student-athletes, I know a lot of our student-athletes do not come from privileged homes, so being able to pay for plane tickets or being able to buy clothes or have extra money at the end of the month to buy food for those that live off campus, I think that’s huge for them. I know their families are really appreciative. I think it’s going to be really, really helpful. I’m really glad Coastal has stood behind the COA.’”⁵⁶

53. Steve Berkowitz and Andrew Kreighbaum, “College Athletes Cashing in with Millions in New Benefits,” *USA Today*, August 18, 2015, at <https://www.usatoday.com/story/sports/college/2015/08/18/ncaa-cost--attendance-meals-2015/31904839/>.

54. Ray Glier, “How New NCAA Player Stipends Are Impacting SEC Football Recruiting,” *SEC Country*, no date, at <https://www.seccountry.com/sec/how-the-new-ncaa-player-stipends-are-impacting-sec-football-recruiting>.

55. Glenn Guilbeaux, “LSU Athletes Enjoying Extra Cash from New NCAA Rule,” *Daily Advertiser*, September 3, 2015, at <https://www.theadvertiser.com/story/sports/college/lisu/2015/09/03/lisu-athletes-enjoying-extra-cash-new-ncaa-rule/71673430/>.

56. Ryan Yung, “CCU, Big South Entering New World of College Athletics with COA Stipends,” *Myrtle Beach Online*, May 10, 2015, at <http://www.myrtlebeachonline.com/sports/college/sun-belt/coastal-carolina-university/article20588934.html>.

64. Adoption of the COA standard has introduced a modest amount of competition among schools with respect to how they calculate their COA allowances.

“Because Alabama had one of the lowest COAs in the conference — a factor that should make it more attractive to potential students because it represents affordability — the Crimson Tide’s student-athlete stipends were effectively capped at \$3,463 per year, well behind many of their peers. That could pose a serious threat, [football coach] Saban saw, to recruiting and player morale. A few months later, as if by magic, Alabama’s COA increased by almost 40 percent, rocketing its stipends to near the top of the SEC.”⁵⁷

65. Decentralization of calculating a school’s COA has introduced a modest amount of competition in compensating athletes. This competition has caused some schools, notably Alabama, to find some previously undiscovered component of its COA that would enable it to offer more generous athletic scholarships. High school football coach Jimmy Smith asked three of his players a recruiting question:

“If Kentucky and Auburn were recruiting you, and you thought the quality of the education was the same at both schools and the playing time was the same at both schools, but you knew Auburn was going to give you this for expenses, and Kentucky was going to give you this for expenses, where would you go?”

“Smith pointed to a sheet of paper listing Cost of Attendance (COA) stipends for each of the 14 SEC schools. Auburn’s number was \$5,586. Kentucky’s number was \$3,598. Shaw, a defensive back who has 24 offers, didn’t hesitate with his answer. ‘War Eagle,’ he said with a smile.”⁵⁸

66. As these examples illustrate, increasing the value of an athletic scholarship from the old GIA cap to COA gave college athletes a monthly stipend that could be spent in any way that the recipient desired. The defendants characterize this increase as *de minimis*: a “small change from the previous scholarship limit,” “the small change to COA,”⁵⁹ and “a small handful of minor, post-*O’Bannon* refinements to various

57. Kendall, *op. cit.*

58. Glier, *op. cit.* “War Eagle!” is Auburn’s battle cry.

59. *Defendants’ Summary Judgment Motion*, pp. 4, 25,

NCAA rules.”⁶⁰ This characterization is incorrect. The increase in the scholarship cap typically amounts to several thousand dollars of unrestricted spending money in each academic year. Moreover, because each school can calculate COA based on a student’s personal situation, the amount of the stipend varies substantially among schools and athletes.

67. When the COA cap was adopted in 2015, the NCAA expected that the value of a full athletic scholarship would increase by about \$2,500, but this turned out to be incorrect because the NCAA did not anticipate that many schools would find ways to increase their COAs within the federal guidelines.⁶¹ In fact, adoption of the new COA cap introduced competition among colleges in the stipend that they offer, thereby causing many students who receive full COA scholarships to be paid substantially more than the COA cap that the NCAA thought that it was adopting.

68. In 2015, surveys of nearly all FBS schools found that average COA stipends varied between \$1,400 and \$6,018 among Power Five schools, with a median of \$3,062 and a mean of \$3,780.⁶² Among other FBS conferences, Conference USA, Mountain West, and Sun Belt had some schools that did not adopt COA and so paid no additional stipend, but only in the Sun Belt did the majority of schools pay no stipend in 2015. The median stipends in the remaining conferences were \$4,376 in the AAC, \$1,000 in Conference USA, \$3,177 in Mid-American, and \$3,720 in Mountain West, and among independents was

60. *Defendants Summary Judgment Reply*, p. 27.

61. For an analysis of the differences between expectations and reality during the first year of COA scholarships, see Jake New, “Playing the Game,” *Inside Higher Ed*, August 13, 2015, posted by *Slate* at http://www.slate.com/articles/life/inside_higher_ed/2015/08/colleges_are_inflating_federally_defined_tuition_cost_to_give_athletes_bigger.html.

62. John Charles Bradbury and Joshua D. Pitts, “Full Cost-of-Attendance Scholarships and College Choice: Evidence from NCAA Football,” *Journal of Sports Economics*, forthcoming (published online March 17, 2017, at <http://journals.sagepub.com/doi/abs/10.1177/1527002517696958>).

\$3,350. The maximum stipend among non-Power Five schools was \$7,018. Thus, not only is the average stipend substantially larger than the NCAA expected, the variation among schools is substantial.

Student Assistance Fund and Other Special Benefits

69. The NCAA makes disbursements to Division I schools from the proceeds of the national championship basketball tournaments that are used to provide additional benefits to athletes. The largest of these programs is SAF, which had a total budget of \$84 million in 2017-18.⁶³ The SAF budget in 2013-14, the year in which the *O'Bannon* case was tried, was \$76 million, indicating that this program has grown despite the increase in the cap on scholarships.⁶⁴

70. SAF grants provide additional financial support exclusively to athletes for expenditures that are not part of the COA calculation. SAF money “shall not be included in determining the permissible amount of financial aid”⁶⁵ for a scholarship athlete. The guideline for grants from these funds is that they “shall be used to assist student-athletes in meeting financial needs that arise in conjunction with participation in intercollegiate athletics, enrollment in an academic curriculum, or to recognize academic achievement,”⁶⁶ but the actual basis for making these awards is left to the schools and conferences.⁶⁷

63. “2018 Division I Revenue Distribution Plan,” NCAA, at http://www.ncaa.org/sites/default/files/2018DIFin_NCAA_DivisionI_RevenueDistributionPlan_20180214.pdf, pp. 2, 14 (Henceforth *2018 Plan*).

64. “2013-14 Division I Revenue Distribution Plan,” NCAA, at <https://www.ncaa.org/sites/default/files/2013-14%20Revenue%20Distribution%20Plan.pdf>, p. 2 (henceforth *2014 Plan*).

65. *2018 Plan*, p. 14.

66. *Ibid.*

67. The autonomy of schools in setting standards for the Student-Athlete Opportunity Fund is illustrated by the requirement at the University of Texas, El Paso, that an athlete complete 10 hours of community service to be eligible for an award. See <https://utepathletics.com/sports/2017/6/7/athleteservices-life-skills-SAOpportunityFund.html.aspx>.

71. In addition to SAF, the NCAA also distributes funds to Division I schools from the Academic Enhancement Fund, with total payments of \$48 million in 2017-18,⁶⁸ compared to \$26 million in 2013-14.⁶⁹ Management of expenditures from this fund is decentralized to schools. While this fund “is intended for enhancement of academic-support programs,” colleges are “encouraged to consider using this fund for the provision of other direct benefits to student-athletes that enhance student-athlete welfare,” including payments for such “Allowable Uses” as educational supplies, expendable supplies, insurance premiums, medical, dental and vision expenses, clothing, travel, and other personal and family expenses.⁷⁰

72. Spending from these programs is available only to college athletes and so receiving a grant from these programs is conditioned on athletic participation. Many allowed uses of these funds are not directly related to the costs of attending college. For example, the University of Washington guidelines for the Special Assistance Fund allow an eligible student to receive up to \$500 per year for: “Clothing... and other essential expenses (e.g., shoes, toiletries, cleaning supplies, backpack, umbrella, pens, pencils, highlighters, etc.).”⁷¹ The LSU guideline lists among the acceptable uses of the Special Assistance Fund: hearing aids, vision therapy, dental expenses, and rental of non-expendable supplies not covered in COA.⁷² Maryland used SAF money to buy an iPad for all of its athletes, while the University of Minnesota used SAF funds to pay for the travel of a football player to attend his aunt’s funeral, to buy a new dress for a women’s basketball player to wear when she was selected in the WNBA draft, and, more generally, to

68. *2018 Plan*, p. 2.

69. *2014 Plan*, p. 2.

70. *2018 Plan*, p. 4.

71. “University of Washington Student-Athlete Special Assistance Fund Policy and Procedures,” at <https://static.gohuskies.com/pdf/genrel/special-assistance-fund-06.pdf>.

72. “NCAA Special Assistance Fund,” at <http://www.lsusports.net/fls/5200/assets/docs/ad/compliance/pdf/safund.pdf>.

make grants to 375 athletes that averaged over \$1,000 each.⁷³

73. Distributions from these funds that are unrelated to educational activities or to participation in college sports can be very large. For example, during 2017-18, Michigan State spent \$50,000 in SAF money to provide basketball player Miles Bridges with a \$10 million insurance policy that covered loss of future wages due to injury.⁷⁴

74. Grants to individual students from these NCAA programs are used for ordinary living expenditures that are unrelated to the cost of attending college or participating in college sports. Students who receive a full COA athletic scholarship and a grant from these programs are being compensated for participating in college athletics beyond COA and so are professional athletes according to the NCAA's definition of an amateur.

Benefits Incidental to Participation

75. Benefits that are "incidental to participation" refer to rewards for participation in athletics. Often these benefits have no connection to the cost of attending school or even the cost of participation in college sports.⁷⁵ These benefits are the most elusive to understand because they are "not related to the principle

73. David McCoy, "NCAA's Little-Known Student Assistance Fund," *CBS Minnesota*, January 12, 2014, at <http://minnesota.cbslocal.com/2014/01/12/ncaas-little-known-student-assistance-fund/>.

74. Graham Couch, "Miles Bridges Is a Millionaire-in-Waiting, Thanks to Insurance," *Lansing State Journal*, April 19, 2017, at <http://www.freep.com/story/sports/columnists/graham-couch/2017/04/19/miles-bridges-insurance-policy-couch-column/100638812/>.

75 The *Deposition of Kevin Lennon*, January 24, 2017 (henceforth *Lennon Deposition*) gives numerous examples of these benefits, among which are reimbursement for transportation and lodging costs for an athlete's parents to attend an athletic contest (pp. 70-72); "apparel, equipment and supplies" (pp. 60-63); entry and facility usage fees (p 73); expenses in connection with national championship events, the Olympics and national team tryouts (pp. 86-87); fees for conditioning activities (such as yoga classes) (p. 88); and loans against future earnings as a professional athlete to purchase loss of professional value insurance (pp. 127-129).

of amateurism,”⁷⁶ but instead are simply defined as any benefit that the NCAA “membership ha[s] agree[d] to provide” and “at any point in time, can agree to change.”⁷⁷ Simply because an incidental to participation benefit is approved by the NCAA, “it would not be considered pay.”⁷⁸ One cannot imagine a better example of the Humpty Dumpty standard.

76. Some incidental to participation awards are huge. An example is compensation to participants in the Olympics. In 2015 the NCAA changed its definition of amateurism to permit payments to college students from their home nation for participation in the Olympics, regardless of the magnitude of these payments.⁷⁹ Some payments to Olympic athletes were comparable to or exceeded the pay of many professional athletes. Swimmer Joseph Schooling was paid \$740,000 by his home nation of Singapore for winning an Olympic gold medal in 2016, but remained eligible to swim for the University of Texas.⁸⁰ U.S. swimmer Katie Ledecky was paid \$115,000 in bonuses for her performance at the 2016 Olympics, but remained eligible for varsity swimming at Stanford.⁸¹

77. Another example of compensation for college athletes that is incidental to participation is awards from schools for participation in bowl games, conference championships, or the national championship in

76. *Ibid.*, pp. 91-92.

77. *Ibid.*, pp. 72-73.

78. *Ibid.*, p. 93.

79. *Ibid.*, pp. 106-108.

80. Texas President Fenves testified nine months later that he had only heard of this payment on the previous day and that he had “no information” on whether this payment had caused the Texas swimming team to lose support from students and alumni. *Deposition of Gregory Fenves*, May 12, 2017, pp. 64-65.

81. Jon Solomon, “NCAA Prez Concerned by Texas Swimmer Paid \$740k for Winning Olympic Gold,” *CBSSports.com*, September 8, 2016, at <http://www.cbssports.com/college-football/news/ncaa-president-concerned-by-texas-swimmer-paid-740000-for-winning-olympic-gold/>.

men's or women's basketball.⁸² For students who also have a full athletic scholarship that pays COA, these benefits can propel the student's total athletic compensation thousands of dollars above COA. These awards are permitted within limits set by the NCAA's members and so are "not tied to our principle of amateurism" because "there's an acknowledgement that awards will be given for participation and then ultimately maybe success in the championship."⁸³

Pell Grants

78. In addition to a COA scholarship and other grants and benefits, low-income college athletes can qualify for and receive additional aid from the federal government. The most important of these programs is Pell Grants. Pell Grants base the amount of financial assistance that a full-time student can receive from the federal government on the difference between a student's financial ability to pay (expected family contribution) and COA at the college in which the student is enrolled.

79. Pell Grants are subject to another cap, which is the maximum amount that the federal government will pay a full-time student, regardless of COA. Currently this cap is about \$6,000, which is less than COA by tens of thousands of dollars.⁸⁴ Nevertheless, if a student receives both an average Pell Grant and a full COA athletic scholarship, the sum of the scholarship and the Pell Grant substantially exceeds COA, thereby paying the student twice for some of the costs that are components of COA.

80. Originally the NCAA did not permit an athlete to benefit from a Pell Grant. If an athlete was awarded both an athletic scholarship and a Pell Grant, the college was required to deduct the amount of the Pell Grant from a student's athletic scholarship, thus making the college, not the student, the

82. *Lennon Deposition*, pp. 120-22.

83. *Ibid.*, p. 122.

84. "Federal Student Aid," U.S. Department of Education, at: <https://studentaid.ed.gov/sa/types/grants-scholarships/pell>.

beneficiary of the grant. In 1984, the NCAA changed this policy to permit a college athlete to keep up to \$900 from a Pell Grant for “miscellaneous expenditures” that were included in the school’s cost of attendance but not in the NCAA’s GIA cap on athletic scholarships.

81. The amount of a Pell Grant that a scholarship athlete could keep was gradually increased until, in 1995, an athlete was permitted to keep both a full athletic scholarship at the NCAA’s old GIA cap and a Pell Grant up to a maximum total equal to COA. Finally, in 2004, the NCAA rule changed again to allow students to receive a full athletic scholarship and to keep the full amount of the Pell Grant, even if the total exceeded COA. Thus, since 2004, some college athletes have received total grants that exceed COA.

82. In 2015, the NCAA’s cap on an athletic scholarship was raised by several thousand dollars to COA, and no further change was made in the rules with respect to Pell Grants. Thus, an extremely important change in the compensation of athletes since the decision in *O’Bannon* is that, beginning in 2015, all students who receive both a full COA athletic scholarship and any amount in a Pell Grant have total grants in excess of COA. The proportion of athletes who receive both a COA scholarship and a Pell Grant is not publicly available for all of the conferences and schools in Division I, but publicly available information shows that this proportion is substantial and, in some cases, is half or more of the students who play football or basketball at FBS schools.

83. For example, a financial report to the NCAA by Ohio State University that became public shows that 47 percent of Ohio State football players received Pell Grants in 2016-17, accounting for nearly half of all Pell Grants to male athletes at the school, and that 64 percent of the football players who received a Pell Grant also received a full COA athletic scholarship.⁸⁵ Nearly one-fourth of Ohio State’s men’s

85. Sheridan Hendrix and Ashley Nelson, “Student-Athletes Look to Pell Grants to Subsidize Education,” *The Lantern*, May 15, 2018, at <https://www.thelantern.com/2018/05/student-athletes-look-to-pell-grants-to-subsidize-education/>.

basketball team and more than half of its women's basketball team received Pell Grants.⁸⁶

84. Data acquired via freedom of information requests from Alabama colleges in 2014 show that 112 Auburn athletes (no breakdown by sport) received \$539,327 (over \$4,800 per athlete) from Pell Grants, and that 131 athletes at the University of Alabama, 67 of whom were football players, received Pell Grants totaling \$566,495 (over \$4,300 per athlete).⁸⁷ Six men's basketball players and ten women's basketball players at Alabama also received Pell Grants averaging \$5,382 and \$5,190, respectively.⁸⁸ At Troy, 200 athletes received \$849,143 (over \$4,200 per athlete), of which 106 were football players (average \$4,170), nine were men's basketball players (average \$4,872), and 13 were women's basketball players (average \$4,902).⁸⁹ Of the seven DI schools in Alabama that reported the number of Pell Grant recipients for each sport, the average number of football players receiving Pell Grants was 70 per college, which is well over half of the average number of players on a college football team.⁹⁰ By comparison, in 2014 (the year of the survey), 37 percent of all college undergraduates received Pell Grants.⁹¹

86. *Ibid.*

87. Jon Solomon, "Pell Grants for Players: Division I Athletes in Alabama Got \$4.8 million in Need-Based Aid." *AL.com*, April 10, 2014, at http://www.al.com/sports/index.ssf/2014/04/pell_grants_for_players_divisi.html.

88. Jon Solomon, "Pell Grants for Players: Crimson Tide Athletes' Need-Based Aid by Sport," *AL.com*, April 10, 2014, at https://www.al.com/sports/index.ssf/2014/04/pell_grants_for_players_alabam.html.

89. Jon Solomon, "Pell Grants for Players: Troy Athletes' Need-Based Aid by Sport," *AL.com*, April 10, 2014, at https://www.al.com/sports/index.ssf/2014/04/pell_grants_for_players_alabam_1.html.

90. The NCAA does not restrict the number of players on a team, but some conferences impose such limits. Among the eight Alabama DI colleges, football rosters vary between 90 and 130.

91. College Board, "Undergraduate Enrollment and Percentage Receiving Pell Grants Over Time," *Trends in Higher Education*, at <https://trends.collegeboard.org/student-aid/figures-tables/undergraduate-enrollment-and-percentage-receiving-pell-grants-over-time>.

85. As discussed above, a Pell Grant covers COA items that also are included in a COA athletic scholarship. Thus, a student who receives both a full COA scholarship and a Pell Grant is being paid twice for some of the same miscellaneous expenditure items. In fact, because a COA scholarship already covers tuition, fees, required books, transportation to and from school, room and board, and other miscellaneous expenditures, the effect of a Pell Grant is to provide additional money for ordinary living expenses beyond any cost that is directly attributable to college attendance or participation in athletics. Thus, according to the NCAA's own definition, granting a full COA scholarship to a student who also receives an average Pell Grant causes that student to be paid thousands of dollars more than COA, thereby making that student a professional, not an amateur, according to the NCAA's Not One Penny standard.⁹²

Summary of Compensation of College Athletes since 2015

86. As discussed above, defendants and their economic expert, Professor Elzinga, assert that if student athletes receive compensation even one penny above their educationally related expenses, that payment is a harmful violation of the principle of amateurism. By the Not One Penny standard, a very large fraction of FBS football players and D-I basketball players are professionals whose compensation, according to the NCAA's alleged procompetitive justifications, reduces the popularity of college sports and detracts from the integration of college athletes into campus life.

87. Expenditures from deposits into a student's bank account are not monitored to be sure that they are made for items that are components of the COA calculation, and in fact can be and are spent on anything, not just the cost of attending school.⁹³ All students who receive a full COA athletic scholarship

92. In the *White* case, Lynn Holzman, then the NCAA's Director of Academic and Membership Affairs and now an NCAA Vice President, also stated that college athletes would no longer be amateurs if they received full COA scholarships and continued to receive Pell Grants. *Declaration of Lynn Holzman*, October 20, 2007, pp. 13-14.

93. *Lennon Deposition*, p. 35.

and money from SAF, benefits that are incidental to participation, and/or a Pell Grant, receive far more than one penny in excess of their educational expenses.

88. A shopping spree for participating in a bowl game or a basketball tournament has nothing to do with the cost of attending school and cannot reasonably be called anything other than pay for play. Likewise, giving money to students to buy insurance against an injury that would jeopardize a professional career, to replace personal items that are lost in a disaster, to buy new clothes to attend a sports award, or to attend the funeral of a friend or relative, while humane, has nothing to do with educational expenses. A bonus for winning an Olympic gold medal cannot plausibly be anything other than pay for performance.

89. All students who receive a full COA athletic scholarship and money from SAF, benefits that are incidental to participation, third-party athletics-related awards, and/or a Pell Grant receive far more than one penny in excess of their educational expenses. The net effect of the new COA cap on athletic scholarships is that many class members now receive payments that go so far above their costs of attending college (including personal living expenditures) that they are able to help to support their parents and siblings. As the former Athletic Director at Kansas State, John Currie, was reported to have said, compensation is now sufficiently great that “some of our student-athletes walk away at the end of the semester and they’ve saved money.”⁹⁴

90. There is simply no principled difference between these total benefits that many college athletes now receive and the compensation of a professional athlete. That is, if a minor league baseball team paid a player \$1500 per month and, following the approach of a COA calculation, itemized that pay as providing \$500 for housing, \$500 for food, and \$500 for other living expenses, this allocation would not

94. Dennis Dodd, “Players about to Get Paid as Money Changes Game in College Athletics,” *CBSSports.com*, February 27, 2015, at <http://www.cbssports.com/college-football/news/players-about-to-get-paid-as-money-changes-game-in-college-athletics/>.

magically transform the player from professional to amateur. Likewise, the player would still be a professional if a minor league team also agreed to pay his tuition to attend college while playing baseball.

91. The distinguishing characteristic of college athletes is not that they are amateurs (which they are not according to any objective, non-tautological definition of the term), but that they are full-time college students who play for their schools. Plaintiffs in this litigation do not challenge the NCAA's rules and policies that assure that athletes actually are students and that improve the likelihood that they will graduate. In this regard, Big 12 Commissioner Bob Bowlsby stated to the Knight Commission on Intercollegiate Athletics his views about college athletes:⁹⁵

“I don't think they're amateurs... [T]he professionals are being paid and amateurs are doing it for the love of the game. And both of those are different than the college athletic environment. We typically categorize athletes as professionals or amateurs, right? And I don't think (college athletes) are either. I think it's a complete(ly) different genre of its own. Doesn't exist anyplace else in the world where higher education and sports participation are linked, are co-curricular — and that makes it different.”

92. Mr. Bowlsby's three-part division of athletes is consistent with the facts. (1) An amateur is an athlete who competes without compensation and does not have to meet academic standards. (2) A professional is an athlete who is compensated and also has no academic requirements. (3) A college athlete is a student in the first five or six years of college who is making reasonable progress towards a degree, who may or may not be compensated (some are walk-ons), and hence who may or may not be a professional. This three-way division is consistent with the standard definitions of amateur and professional, and with the relief plaintiffs seek. Mr. Bowlsby's trichotomy does not require maintaining the current compensation cap but does require ensuring that college athletes remain college students.

95. Steve Berkowitz, “Big 12's Bob Bowlsby: They're College Athletes, Neither Amateurs nor Pros,” *USA Today*, May 1, 2017, at <https://www.usatoday.com/story/sports/college/2017/05/01/bob-bowlsby-college-athletes-not-amateurs-knight-commission/101171382/>.

PROCOMPETITIVE JUSTIFICATIONS

93. The defendants allege that the current NCAA restrictions on the compensation of college athletes have two procompetitive justifications: (1) these restrictions allegedly increase the popularity of college sports, and (2) these restrictions allegedly improve the integration of athletes into academics and other aspects of campus life.⁹⁶ Defendants assert that the mechanism for creating these alleged procompetitive benefits is that the NCAA's rules regarding the compensation of college athletes preserve amateurism, which the NCAA defines as a system in which students are not paid to participate beyond compensation to offset the costs of attending college and participating in college sports.

94. One problem with defendants' argument about procompetitive justifications is that it is based on the false premise that NCAA rules guarantee that college athletes receive no compensation for participation in athletics other than for their education-related costs. As documented in this testimony, since 2015 many scholarship athletes have received compensation that substantially exceeds COA. As a result, the defendants' practices since 2015 do not accord with the NCAA's definition of amateurism.

95. Moreover, before 1957, rules and policies regarding the compensation of college athletes were promulgated and enforced by conferences and individual colleges, not the NCAA. Under this system, college athletes were permitted to accept compensation from third parties (entities other than the universities in which they were enrolled).

96. Hence, according to defendants' arguments, before 1957 and since 2015 many college athletes were paid professionals. As a result, big time college football and basketball should have been unpopular during these periods (comparable to a professional minor league) and college athletes should have been less integrated into campus life than when the old GIA cap was in place, especially between 1976 and 2004, when colleges were required to confiscate all or some of an athlete's Pell Grant.

96. *Defendants' Summary Judgment Motion*, pp. 40-50.

The Demand for College Sports

97. The defendants claim that the NCAA’s current rules restricting the compensation of FBS football players and Division I basketball players are necessary to preserve the popularity of college sports. Defendants offer essentially no economic evidence to support this claim other than “the opinions of media and sponsorship partners, [and]... the analyses of witnesses who have spent decades working in college administration and college sports...”⁹⁷ These “opinions” and “analyses” consist entirely of speculative statements by employees of the NCAA and its members who have neither studied nor even had others study the demand for college sports.

98. Notably absent from recitation of the evidence about the demand for college sports in the *Defendants’ Summary Judgment Motion* are references to the declarations of their economic experts. That is because their economic experts did not undertake an economic analysis of the relationship between the compensation of college athletes and the demand for college sports.

99. The *Heckman Report* does not mention the demand for college sports. The *Heckman Reply* contains no analysis of the demand for college sports, but mentions this issue twice.

100. First, Professor Heckman inaccurately asserts that the *Noll Declaration* contemplates “a labor market that divorces student athletics participation from the university environment” (the *Noll Declaration* assumes that the NCAA policy that college athletes be students in good standing will continue), and then observes that minor leagues do not generate “comparable interest” and “do not provide the same benefits

97. *Ibid.*, p. 40. The NCAA notes that two witnesses, Mike Aresco and Mark Lewis, worked in the broadcasting industry (*Ibid.*, p. 43); however, both also worked in college sports. Aresco is the Commissioner of the American Athletic Conference, and Lewis was an Executive Vice President at the NCAA. Thus, the NCAA’s fact witnesses who are cited in *Defendants’ Summary Judgment Motion* all in some way represent the defendants.

to the athlete and the general public as university-sponsored amateur athletics.”⁹⁸ Professor Heckman does not explain why a minor league system in which college athletes are not students is the only alternative, let alone a plausible alternative, to the current NCAA system.

101. Second, Professor Heckman makes an irrelevant criticism of the analysis in the *Noll Declaration* about the effect on demand of greater compensation for athletes.⁹⁹ The *Heckman Reply* contains no analysis to support the claim that removing the NCAA’s current rules restricting compensation for class members would have an adverse effect on demand.

102. Professor Elzinga opines that the popularity of intercollegiate sports depends upon whether team members are “*bona fide*” college athletes, by which Professor Elzinga means that athletes are both students and amateurs.¹⁰⁰ Professor Elzinga describes how paying an athlete more than COA might, in theory, affect the popularity of college sports. “If a particular school (or conference) professionalizes student-

98. *Heckman Reply*, pp. 11-12. Professor Heckman assumes that the only alternative to the status quo is a system in which college athletes are not students without offering an explanation for why this outcome would occur. Because the *Noll Declaration* assumes that the NCAA’s rules and policies requiring college athletes to be students in good standing will remain in place, criticisms of it that are based on the premise that college sports will be separated from the rest of the university and college athletes stop being students are irrelevant.

99. *Ibid.*, p. 28. Professor Heckman’s criticism is that the *Noll Declaration* analyzes only the effects of small changes in compensation, but concludes that large changes also would have no adverse effect on demand. (Professor Heckman does not define “small” and “large” nor does he explain why conferences, left to make their own rules, would adopt a system that led to “large” changes.) Professor Heckman’s criticism is not relevant because defendants assert that small amounts of compensation in excess of COA would cause college athletes to be professionals and, in so doing, reduce demand. His criticism also is misplaced because, according to my understanding of rule of reason antitrust cases, the defendants bear the burden of proof that their anticompetitive conduct has a reasonable business justification, which here requires showing that an increase in compensation would negatively affect demand. The task of the *Noll Declaration* was to show that the defendants have not produced any economic evidence to support their assertion that the demand for college sports would be adversely affected if college athletes were paid more, regardless of whether the amount were small or large.

100. *Elzinga Report*, pp. 21, 49 (n. 129), 78, 80, 94 (twice), 96.

athletes, then (as I described in my initial report) the school (or conference) will inflict negative externalities on other schools and their constituencies, reducing the value of amateur student-athletics to them... [T]he initial retreat from amateurism tends to cause a downward cycle in the level and value of student-athlete activity...”¹⁰¹ Professor Elzinga’s theoretical argument assumes that a college will benefit if it pays an athlete more than COA (greater demand due to higher team quality offsets lower demand from fielding professional athletes), but asserts that this benefit is more than offset by an alleged “negative externality” on the popularity of all other teams, even teams that the college does not play.¹⁰²

103. Professor Elzinga does not undertake any empirical analysis of either current or historical data to show that the assumptions in his theoretical story are true, including the crucial assumption that his hypothesized “negative externality” exists for any other college, let alone is important enough to cause a substantial decline in the demand for FBS football and Division I basketball at all colleges that field teams in these sports. Instead, Professor Elzinga bases his assumptions on the opinions expressed by NCAA and college officials (without attempting to determine whether these opinions have any basis in fact).¹⁰³

104. While defendants use the word “analyses” to describe the statements by their fact (lay) witnesses, none of these witnesses actually undertook an analysis of this issue or even was aware of any analysis by anyone else. Instead, these statements by present or former employees of the NCAA and its Division I members are bare assertions without evidence or explanation that support the defendants’ characterization of their argument: “the prohibition on paying student-athletes is necessary to preserve the academic nature of college sports by ensuring student-athletes are *bona fide* students—a feature fans find attractive.”¹⁰⁴

101. *Elzinga Reply*, p. 11.

102. *Elzinga Report*, pp. 85-93.

103. *Ibid.*, pp. 79-81, 94-98.

104. *Defendants’ Summary Judgment Motion*, p. 45.

105. Statements and documents from interested parties sometimes provide information that can be useful in undertaking an economic analysis of alleged anticompetitive conduct. But statements by NCAA and college officials that state an opinion about the economic effects of anticompetitive conduct without any supporting analysis or facts are not a valid substitute for economic analysis as the basis for an economist to form scientific, professional opinions. With respect to the effect of compensation of college athletes on the popularity of college sports, such an analysis would examine whether a measure of popularity (attendance, viewers, revenue) was affected by changes in compensation for participating in the sport, including the effects of episodes in which an athlete received compensation exceeding COA. Neither defendants' economic experts nor fact witnesses have undertaken such a study, and defendants' claim that compensation above COA by even one penny causes a decline in the popularity of college sports has no basis in either theoretical or empirical economics.

106. The opinions expressed by defendants' fact witnesses are not a reliable basis for economic conclusions because they are based on incorrect factual premises: that college athletes currently are not paid to participate in athletics (they are – the NCAA lost that battle in 1957), and that compensation of college athletes is currently capped at COA (it isn't – the Not One Penny standard currently is violated for many college athletes). The statements by defendants' fact witnesses also conflate an athlete's status as a student with an athlete's status as an amateur. The claim that college sports would be less popular if college athletes were not students (like minor leagues, employing athletes whose only connection to the college is the team name) is not disputed. The issue in dispute is whether athletes who are genuine students at the college for which they play also must have their pay regulated by an industry-wide cartel manager, the NCAA, to maintain the popularity of college sports.

107. Another reason that an economist should not rely on economic assertions by the defendant's fact witnesses is that college and NCAA officials do not have good track records in predicting the effect on

the demand for college sports of increases in compensation of college athletes. Before the NCAA adopted the current system (COA scholarships plus additional benefits from SAF grants, compensation that is incidental to participation, including payments from third parties, and Pell Grants), NCAA and university officials claimed that permitting compensation above the old GIA cap would reduce demand for college sports by turning college athletes into professionals.¹⁰⁵

108. One university official who expressed an opinion about the effects of compensating college athletes more than COA was University of Texas President Gregory Fenves, who is one of the college officials upon whom Professor Elzinga relies for the opinions expressed in the *Elzinga Report*. At his deposition, Dr. Fenves testified that a Texas basketball player cannot receive more than COA and that student interest in basketball would decline if Texas athletes received both a full COA scholarships and Pell Grants. Dr. Fenves was misinformed.

109. According to financial documents produced by the University of Texas,¹⁰⁶ in 2015-16 (the first year in which full COA scholarships were allowed), the Texas men's basketball team had eleven players on full COA scholarships (worth either \$28,460 or \$53,508, depending on whether a student was a resident of Texas). Of these eleven players, seven also received a Pell Grant that put their total compensation

105. In the *White* case, NCAA and college officials asserted that increasing athletic scholarships above the GIA cap would undermine the popularity of college sports and that many schools would not pay more even if allowed to do so. For example, Lynn Holzman, at the time the NCAA's Director of Academic and Membership Affairs and currently an NCAA Vice President, stated that the proposal to adopt full COA was rejected by Division I due to "concerns of amateurism" and opined that if the GIA cap were raised to COA, college athletes would probably not be allowed to continue to receive SAF awards and Pell Grants in order to preserve amateurism. *Declaration of Lynn Holzman*, October 20, 2007, p. 13-15.

106. See *MBK-UTX000808-UTX000810.pdf*. Some members of the football team and the women's basketball team at Texas also received full COA plus Pell. See *Football-UTX000786-UTX000807.pdf* and *WBB - REDACTED-UTX000811-UTX000816.pdf*.

above COA.¹⁰⁷ Although Dr. Fenves and Professor Elzinga assert that this outcome would have a negative impact on demand, in reality it had so little impact on demand that Dr. Fenves apparently was not aware that it had even occurred.¹⁰⁸

Testing for a Demand Effect of the 2015 Rule Changes

110. Defendants' economic experts and fact witnesses did not attempt to develop an empirical test of the effect of compensation in excess of COA on the popularity of college sports, but the form that such a test would take easily can be inferred from the *Elzinga Report*. Professor Elzinga assumes that a school that pays even one penny more than COA for just a single college athlete will experience a direct financial benefit, but that all other schools will experience a financial loss that, in aggregate, exceeds the gain of the first school.

111. When the current financial aid rules were adopted, nearly all FBS schools immediately moved to full COA scholarships, meaning that nearly all FBS schools had at least one athlete whose total compensation, including a Pell Grant, SAF awards, and benefits incidental to participation, exceeded COA and so made the athlete a professional. According to defendants' argument about demand, each FBS school that adopted COA scholarships should have experienced a small benefit from its one or more professionals, but a larger loss from the fact that nearly all other FBS schools also fielded professionals. Similarly, substantially more than half of the remaining Division I schools also adopted COA scholarships after 2015, implying that the popularity of Division I sports outside of FBS also should have declined. Thus, one test of the validity of the hypothesis put forth by the defendants is whether the popularity of college sports was negatively affected by the adoption of the new financial aid system in 2015 that enabled

107. These students also were eligible for additional compensation from SAF and benefits that are incidental to participation.

108. *Deposition of Gregory Fenves*, (rough), May 14, 2017, pp. 38-42.

many college athletes to be paid thousands of dollars more than COA. The economic evidence shows that the negative externality hypothesis fails this test decisively.

112. To my knowledge, only one academic study undertakes a statistical test of whether the compensation system that was adopted in 2015 affected the popularity of sports.¹⁰⁹ This study examines attendance and television ratings of football games involving Power Five schools, and includes an explanatory variable that is zero for all schools in 2014 and equals the additional stipend that was paid by each school in 2015. Thus, the regressions test not only whether the move to COA affected the demand for big-time football, but also whether the amount of compensation had an effect. The results were negative: football attendance and television ratings among Power Five schools was unaffected.

113. Exhibit 168(c) shows revenues for FBS conferences from 2009-10 to 2015-16, plus fragmentary data for 2016-17. These revenues mostly come from television rights and bowl games, with payments from the latter also mainly from television. Exhibit 168(c) can be used to infer the effects of several major events during the past few years. In general, total FBS revenues have grown throughout the period. The only exception is that total revenue was essentially flat between 2012-13 and 2013-14, reflecting the effect of the dissolution of the old Big East Conference, the sixth power conference before its demise and replacement in FBS by the American Athletic Conference. (Some old Big East schools joined a new Big East, which is a formidable power in men's basketball but does not play FBS football.)

114. The effect, if any, of moving to a system of full COA scholarships plus additional compensation on total conference revenues would have occurred in 2014-15 and/or 2015-16. The district court's *O'Bannon* decision and the announcement that the NCAA Board had approved allowing the Power Five

109. Thomas A. Baker III, Marc Edelman, and Nicholas M. Watanabe, "Debunking the NCAA's Myth that Amateurism Conforms with Antitrust Law: A Legal and Statistical Analysis," *Tennessee Law Review* (forthcoming 2018), at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3072641.

conferences to pay full COA scholarships both occurred before the start of the 2014-15 football season. If the popularity of college sports was reduced by these announcements, revenues would have been adversely affected before implementation of the change, but revenues of FBS conferences increased by \$530 million (30 percent) in 2014-15.

115. When the system of full COA scholarships plus additional benefits was implemented in 2015-16, FBS conference revenues rose another \$250 million (11 percent), including an increase of nearly \$45 million (24 percent) among schools in FBS conferences other than the Power Five. Among the five FBS conferences for which data are available for 2016-17, revenues increased again for four of the five FBS conferences and for the total for all five. Thus, even if some fans oppose paying college athletes more than COA, these data do not reveal that their opposition has had a negative effect on revenues.

116. The main source of increased revenue for college sports is from television. All Power Five conferences have experienced rapid increases in television revenues since 2015, when all Power Five schools adopted COA scholarships and, as a result, many of their football and basketball players began to be compensated substantially in excess of COA. In 2017-18, each Power Five conference distributed over \$25 million to each of its members, the Big Ten disbursed over \$50 million to its members,¹¹⁰ and three of the four other Power Five conferences expect to reach \$40 million per member soon.¹¹¹ The increased

110. Angelique S. Chengelis, "Michigan Athletics Projects \$2.5 million Surplus," *Detroit News*, June 21, 2018, at <https://www.detroitnews.com/story/sports/college/university-michigan/wolverines/2018/06/21/university-michigan-athletics-projects-2-5-million-budget-surplus/723113002/>.

111. The facts in this paragraph and the next paragraph are taken from the following: Jennifer Fierro, "In Horseshoe Bay, Big 12 Head Bob Bowlsby Says Conference Is Alive and Well," *DailyTrib.com*, May 10, 2017, at <http://www.dailytrib.com/2017/05/10/speaking-horseshoe-bay-big-12-head-bob-bowlsby-says-conference-alive-well/>; Gil Lebreton, "Eight More Years of Annual Big Checks Keeping Oklahoma in Big 12," *Star Telegram*, May 9, 2017, at <https://www.star-telegram.com/sports/spt-columns-blogs/gil-lebreton/article149620194.html>; Brent Schrottenboer, "Panic in the Pac-12 as Conference Quickly Falls Behind Rivals," *USA Today*, June 12, 2016, at <https://www.usatoday.com/story/sports/2018/06/12/panic-pac-12-conference->

revenue from television indicates that the popularity of college sports on television – mainly football and basketball – has not suffered from increasing the compensation of college athletes above COA.

117. The rapid recent increase in conference television revenues is due in part to the creation of conference networks. The Big Ten and Pac-12 created networks before the NCAA raised the cap on college scholarships to COA, but in 2014-15, the same year that full COA scholarships were announced for the future, the SEC Network was launched successfully.¹¹² The Atlantic Coast Conference, which has been selling its television rights directly to networks, announced in July 2016 – a year after athletic scholarships were increased to include a cash stipend – that the ACC Network would be launched in collaboration with ESPN in 2019 (ESPN began live streaming of ACC games in 2016).¹¹³ The launch of the ACC Network is expected to bring the annual distribution to each ACC member to more than \$40 million, an increase of \$15 million.

118. In 2019, the only Power Five conference without a dedicated TV network will be the Big 12, which sells television rights to some games directly to networks and allows each member school to sell rights to other games. Despite not controlling all TV rights and not having its own network, the Big 12 distributed \$36.5 million to each of its members in 2017-18, and expects to go over \$40 million in the near future. The Big 12's policy of leaving some TV rights to its members enabled the University of Texas to create the Longhorn Network, which is dedicated to televising games and other programming involving the University of Texas. The Longhorn Network generates another \$20 million per year. Notwithstanding

quickly-falls-behind-rivals/686880002/; and Chuck Carlton, "Here's How Much Money Each Big 12 School Will Receive after Conferences Brings in Record \$364 Million," *Dallas News*, June 1, 2018, at <https://sportsday.dallasnews.com/college-sports/collegesports/2018/06/01/big-12-announces-record-revenue-of365-million-spring-meetings-close>.

112. Richard Sandomir, "SEC Will Start TV Network in 2014," *New York Times*, May 2, 2013, at <http://www.nytimes.com/2013/05/03/sports/ncaafootball/sec-will-have-own-tv-network-starting-in-2014.html>.

113. Derek Volner, "ACC Network Set to Launch in 2019," *ESPN Media Zone*, July 21, 2016, at <http://espnmediazone.com/us/press-releases/2016/07/acc-network-set-launch-2019/>.

the concern expressed by Dr. Fenves about paying athletes more than COA, Texas seems to be doing quite well even though most of its scholarship basketball players are paid substantially more than COA.

119. The NCAA's annual financial report for Division I also contains revenue data that can be used to detect the effect of changes in NCAA rules about compensation of athletes. These data include all sources of revenue, not just from the conference, but the NCAA reports only the median value for each of several categories of colleges. This convention masks the revenues of the major collegiate athletic powers, each of which generates revenues that are greater than many major league professional sports teams. Texas, for example, generates far more revenue than the median among Power Five schools.

120. Exhibit 168(d) contains the most recent data from the NCAA for "generated revenue," or revenue directly attributed to the athletic department from such things as tickets, concessions, licensing, and broadcasting, and does not include allocations from a school's central administration or student government. These data separate power conferences ("autonomy") from the rest of FBS and also provide data on FCS schools and D-I schools that do not play football. For all groups, median generated revenues were lower in 2013-14 (before the *O'Bannon* decision) than in 2015-16 (when many college athletes began to receive compensation in excess of COA). These data are not consistent with the hypothesis that revenues for any category of Division I were adversely affected by the fact that many athletes at FBS schools, and most football and basketball players at some major powers, began to be paid more than COA.

121. Still another information source that reports generated revenues for each sport is the data from the U.S. Department of Education that are collected in connection with the Equity in Athletics Disclosure Act (EADA). EADA revenues are similar to but usually slightly smaller than total revenues calculated by the NCAA.¹¹⁴ EADA data are available for each sport, and so can be used to test whether the sports at issue

114. The NCAA's total revenue data include appropriations from the college's central budget and payments from the student government and so are somewhat greater than generated revenue.

in this litigation (football and basketball) were adversely affected by the new compensation limits. Exhibit 168(e) shows the revenue from football and men's and women's basketball for FBS schools and the rest of Division I from 2009-10 through 2016-17. These data show that neither the announcement of a change in NCAA compensation policy in 2014 nor its implementation in 2015 had a negative effect on revenues from these sports.

122. An especially interesting entry is for the Ivy League, which does not offer athletic scholarships and so should have suffered an especially harmful negative externality when many other schools switched to COA.¹¹⁵ In fact, Ivy League revenues increased in both 2014-15 (the announcement year) and 2015-16 (the implementation year).

123. All of these data also are consistent with the testimony of the NCAA's designated witness on consumer interest that there has been no adverse effect on consumer demand in FBS football and Division I basketball since the new COA limits went into effect.¹¹⁶

The Effects of Violations of NCAA Compensation Rules

115. According to Professor Elzinga, if schools have different standards for compensation of athletes, "consumer interest in contests between those schools would be diminished." *Elzinga Reply*, p. 7. "We observe this in the case of Ivy League schools, which, unlike FBS schools do not offer athletic scholarships" (pp. 7-8). The *Elzinga Reply* then notes that Ivy League schools did not schedule any football games with FBS schools in 2015-16 or 2016-17 (p. 8), that Ivy League schools have played FBS schools only 26 times (footnote 72, p. 25), and that "[t]here are very few football games between Harvard and Auburn" (p. 25). The focus on football is misplaced because the Ivy League belongs to the Football Championship Subdivision (FCS) of Division I, and FBS schools normally play FCS schools at most once per season. But both FBS and FCS schools play other Division I sports. In men's basketball, Harvard played national power Kentucky in 2017-18 (losing by nine points), and in women's basketball Harvard played Professor Elzinga's own school, Virginia, in 2017-18 (losing by two points).

116. Lewis Deposition, p. 112 ("Q. . . . Do you believe that that [COA] rule change led to any significant harm to consumer demand in those two sports? . . . THE WITNESS: No, I don't, and it's changed – it's changed many times through the years, and I don't believe in any instance did it – did it affect the demand.").

124. Another method for testing the effect of compensation above COA is to examine the effects on the popularity of sports when a college commits an infraction of NCAA rules by providing excess benefits to athletes. These violations provide an opportunity to evaluate defendants' claims about the consequences of fielding a team that includes a player who is a professional according to the NCAA's rules.

125. To develop an empirical test of whether the negative externality exists and is important requires an understanding of the timing and duration of the negative externality of paying college athletes more than COA. The explanation of the negative externality in the *Elzinga Report* implies the following sequence of effects.

126. For the school that committed the infraction, the benefit arises from an improvement in team quality. Presumably the college that violates the compensation rules receives this benefit when a tainted "professional" begins playing. A negative effect arising from attenuation of the connection of a school's fans to its team (Professor Heckman refers to this as an example of the "economics of identity"¹¹⁷) presumably cannot occur until fans know that the college player received impermissible benefits, usually after this player begins to play at the school (in some cases much later).¹¹⁸

127. For other schools, the alleged negative externality, if it exists, presumably occurs when the infraction becomes public information, although this date is ambiguous because the possibility of a violation often is announced long before the violation is proved and punishment is rendered. Thus, retrospectively, one can detect these effects by examining indicators of the popularity of both the school

117. *Heckman Reply*, p. 19.

118. For example, excess payments to USC Heisman Trophy winner Reggie Bush were first mentioned in the press in April 2006, but the ensuing investigation lasted for several years and punishment was not imposed until June 2010. Bush moved on to the NFL from USC after the 2006 season. See Neil Waechter, "Not Just O. J. Mayo – USC Has a History of Controversy," *Bleacher Report*, May 18, 2008, at <https://bleacherreport.com/articles/24039-not-just-oj-mayo-usc-has-a-history-of-controversy>, and "NCAA Delivers Postseason Football Ban," *ESPN*, June 11, 2010, at <http://www.espn.com/los-angeles/ncf/news/story?id=5272615>.

committing the violation and other teams through the evolution of the career of the player who received impermissible compensation.

128. To illustrate how such a test could be performed, consider a highly publicized recent example of a violation of the NCAA's amateurism rules. Heisman Trophy winner Johnny Manziel, the Texas A&M quarterback, was investigated for signing autographs that were then sold. Although the NCAA concluded that the evidence was insufficient to prove that Manziel received an improper benefit for his autographs, he was nonetheless required to sit out the first half of his team's first game in 2013 as punishment for violating the NCAA's rules by being involved in selling his autograph.¹¹⁹ The immediate effect of Manziel's case on Texas A&M (asserted to be positive) would be revealed by the popularity of games involving Manziel in the 2012 season, but this positive effect would be diminished in 2013 once the violation and punishment became publicly known. The alleged negative effects on other schools would be revealed in the popularity of their games in 2013 and subsequent seasons (2014-15 and beyond).

129. ESPN televised the game in which Manziel served his one-half-game suspension. The quarter-hour Nielsen audience ratings rose in the second half after Manziel entered, peaked in the third quarter as the game changed from close (28-21 at the half) to an easy victory for Texas A&M (52-28), and finished 61 percent above the average rating for ESPN's early Saturday games in 2012.¹²⁰ Manziel's second game

119. The Manziel story is described in Claire St. Amant, "Johnny Manziel Accused of Selling Autographs for \$10,000 in Improper Scheme," *Culture Map Dallas*, August 5, 2013, at <http://dallas.culturemap.com/news/sports/08-05-13-johnny-manziel-selling-autographs-ncaa-investigation/>; George Schroeder, "Analysis: The Johnny Manziel Autograph Case," *USA Today*, August 16, 2013, at <http://www.usatoday.com/story/sports/ncaaf/sec/2013/08/15/johnny-manziel-texas-am-ncaa-investigation-autographs-for-money/2662257/>; and Patrick Rishe, "Johnny Manziel's Half-Game Suspension Reflects Half-Witted NCAA Justice," *Forbes*, August 28, 2013, at <http://www.forbes.com/sites/prishe/2013/08/28/johnny-manziels-half-game-suspension-reflects-half-witted-ncaa-unbalanced-justice/>.

120. Rachel Bachman, "How Johnny Football Moved the TV Needle," *Wall Street Journal* September 13, 2013, at <http://online.wsj.com/article/SB10001424127887323846504579071533162496244.html>.

against top-ranked Alabama was televised by CBS. The rating for this game was the highest of any college football game on CBS in 23 years, up by 200 percent over the opening SEC game on CBS, Alabama versus Arkansas.¹²¹ Obviously, playing Johnny Manziel did not diminish the popularity of the games of his own team, implying that the negative effect of fielding a professional athlete on the popularity of Texas A&M football either did not exist or was swamped by all of the other factors that determine the popularity of a specific game involving specific teams.

130. Professor Elzinga's hypothesized "downward" spiral at other schools should be most apparent in the SEC, the conference in which Texas A&M is a member and plays eight of its twelve regular season games. Depending on the timing of the effect, the demand for SEC games should have been reduced in the year immediately following the scandal (2013-14), the year thereafter (2014-15), or both. But the data reveal no such negative effect. In 2013-14, SEC conference revenues were up by more than \$40 million, and in the next fiscal year (2014-15), SEC revenue grew by another \$200 million (Exhibit 168(c)). Again, if the negative externality exists, it must be sufficiently small that other factors affecting the popularity of SEC football overwhelm the effect of Manziel's rules violation.

131. An example of a major case involving unauthorized benefits occurred at Purdue, which was fined \$380,000 for, among other things, giving players improper benefits.¹²² One of the university officials who was interviewed by Professor Elzinga was Morgan Burke, Purdue's former Director of Athletics. Professor Elzinga did not ask Mr. Burke about the effect of this violation and punishment on the demand for basketball at Purdue or its Big Ten rivals. Defendants' economic experts did not examine any data about the effect of this case on the popularity of men's basketball at Purdue and other Big Ten colleges to

121. Chip Patterson, "CBS: Alabama-Texas A&M TV Ratings Highest in 23 Years," *CBSSports.com*, September 15, 2013, at <http://www.cbssports.com/collegefootball/eye-on-college-football/23663035/cbs-alabamatexas-am-tv-ratings-highest-in-23-years>.

122. "Purdue Hoops on Probation," CBS News, May 11, 1999, at <http://www.cbsnews.com/news/purdue-hoops-on-probation/>.

ascertain whether the facts are consistent with the assertion that paying college athletes more than NCAA rules allow adversely affects the demand for college sports.

132. Major infractions of NCAA compensation rules are potentially important in this matter because they provide an opportunity that defendants' economic experts did not pursue for testing and measuring defendants' alleged negative effect on the demand for college sports of playing professionals (as the NCAA defines them) in college games. Two relevant facts about Division I sports lead to the conclusion that the alleged negative externality from fielding professionals does not exist or is too small to be detectable. One fact is that Level I and Level II violations of NCAA rules by Division I schools regarding compensation of athletes (either impermissible payments to recruits or excessive benefits to enrolled athletes) are not rare (a few per year).¹²³ The other fact is that revenues from FBS football and Division I basketball continue to grow, as indicated in Exhibits 168(c), (d), and (e). Thus, repeated major infractions in which fines and other penalties are imposed on colleges for excess benefits have not undermined the popularity of college sports. The most plausible inference to draw from these data is that the negative effect on demand of violating the NCAA's compensation rules either does not exist or, if it does, is economically unimportant.

Integration into Campus Life

133. Defendants assert that the current restrictions on compensation of college athletes enhance the integration of college athletes into campus life. In this regard defendants offer two arguments.¹²⁴ First,

123. Major (Level I or Level II) infractions are listed at <https://web3.ncaa.org/lstdbi/search?types=major&q=>. This list includes all major violations, not just violations associated with impermissible benefits, but the latter can be found by searching the database using such terms as "benefits" and "financial aid." During academic year 2017, among the major violations are improper benefits to football players at Mississippi and basketball players at South Florida. Several impermissible benefits cases also occurred involving other sports at other D-I colleges.

124. *Defendants Summary Judgment Motion*, p. 47.

“if student-athletes were paid more than they currently are, they would likely devote more effort to and spend more time on their sports” and less time on academics and college life. Second, defendants make reference to “the potential wedge paying student-athletes would create between those students and the rest of the campus community.” Neither of these claims is supported by economic evidence.

134. Defendants’ assertions about the integration of athletes into campus life differ in an important way from defendants’ allegation that excessive compensation of college athletes adversely affects the popularity of college sports. The alleged effect on demand is a hypothetical “negative externality” in that a mutually beneficial agreement between a college (it experiences increased demand by paying more to its athletes) and an athlete (who receives more compensation) harms third parties (other colleges and their fans). If this argument were correct, economic welfare conceivably could be improved by capping the compensation of athletes, although, even in this case, whether welfare is improved depends on the magnitudes of all of the effects of playing a professional athlete.

135. By comparison, defendants’ assertions about the integration of athletes into campus life amount to the claim that colleges and students cannot be trusted to reach an agreement that is in their own mutual best interests. That is, colleges and students allegedly would harm themselves by entering into a compensation agreement that pays college athletes more than the rules allow. Here, paying athletes more than NCAA rules allow is alleged to have two adverse effects. First, campus life is made less pleasant because a wedge allegedly is driven between its athletes and other members of the campus community (other students, alumni, faculty, etc.). Second, the welfare of college athletes is reduced because the athletes’ academic performance and connections to the campus community are undermined.

136. In this hypothetical world of irrational colleges and athletes, the NCAA’s rules governing compensation of athletes are paternalistic – to stop colleges and athletes from harming themselves. The premise of this argument is that competition itself is the problem – in a competitive market, colleges and

their athletes allegedly will adopt mutually destructive compensation agreements, and the NCAA is doing college athletes a favor by adopting rules that transfer income from them to colleges by denying them access to a competitive market.

Academic Success

137. The defendants state that “experts on both sides have testified that payments for athletic performance would incentivize student-athletes to spend even more time on athletics, which could reduce the amount of time they spend on athletics.”¹²⁵ Defendants cite the depositions of Professors Lazear and Heckman and the *Heckman Reply* to support this claim. Professors Lazear and Heckman both referred in general terms to the tendency of people to respond to incentives. Professor Heckman made no statement about athletic scholarships, and Professor Lazear stated that increasing pay for college sports would increase the incentive of athletes to play hard and stay on the team. Professor Elzinga asserted that if compensation of college athletes were increased, they would be “encouraged and incentivized to place paramount emphasis on their athletic performance” and “would find their incentives skewed against his or her studies.”¹²⁶

138. The actual statements by these economic experts do not provide support for defendants’ allegation that relaxing the NCAA’s restrictions on compensating athletes would harm them academically. All of these statements are theoretical, stating the tautology that if the rewards from an activity increase, then, all else equal, people will have an incentive to do more of it. None of these economists actually state that increasing the value of an athletic scholarship would adversely affect academic performance. In fact, Professor Heckman believes that, once all factors that influence college completion are taken into proper

125. *Ibid.*, p. 46.

126. *Elzinga Report*, p. 22. See also pp. 78-79.

account, an increase in a student's financial resources would be likely to increase attendance and graduation rates.¹²⁷ Moreover, none of these economists undertook an empirical analysis of the effects of changes in the compensation of athletes on their academic performance.

139. In reality, the incentive to work harder on athletics is not the only possible effect of an increase in the compensation of a college athlete. As a theoretical matter, the effect of an increase in the value of an athletic scholarship is more complex than this. From a purely theoretical perspective, an increase in the value of a scholarship has two other potentially important economic effects.

140. First, a condition of receiving compensation as a college athlete is that a student must remain in good academic standing, so one could make precisely the same theoretical argument about incentives with respect to academic performance. That is, if compensation for class members increases, each athlete would have a greater incentive to remain academically eligible for athletic competition. Since 2015, athletic scholarships in Power Five conferences and in many other Division I schools cannot be withdrawn for reasons of athletic performance.¹²⁸ If a class member's position on a team is assured because the student is an excellent athlete or has a guaranteed multi-year athletic scholarship, the only plausible ways that a scholarship can be lost is by failing academically or engaging in antisocial behavior, in which case the primary incentive from an increase in compensation of the class member is to increase academic effort and to improve personal behavior.

127. *Deposition of James J. Heckman*, August 18, 2017, pp. 143-44.

128. Cancellation of scholarships for reasons related to performance is still a problem at some schools. A recent example occurred at North Carolina Central, not exactly an athletic powerhouse, when, despite the school's best season in several years, a new coach cut several scholarship athletes from the team, including some who were near graduation. Steven J. Gaither, "NCCU Women's Hoops Cuts Nine Players, Including Scholarship Players," *HBCU Gameday*, March 26, 2018, at <https://hbcugameday.com/2018/03/26/nccu-womens-hoops-cuts-nine-scholarship-players/amp/>. This action indicates that the commitment to the academic success of athletes by the NCCU athletics department is minimal.

141. Second, an increase in compensation of class members would increase the recipient's income. In general, as income increases, so, too, does the demand for higher education, implying that a more valuable scholarship leads to an increase in educational attainment.

142. As an empirical matter, the overall effect on academic achievement of an increase in compensation of a class member is determined jointly by all three factors: (1) the incentive to stay on a team; (2) the incentive to retain academic eligibility; and (3) the effect of higher income on the demand for higher education. Peer reviewed empirical research shows that the combined effect of these three factors is that greater compensation of class members is likely to improve their academic performance.

143. The first piece of evidence is scholarly research on the effect of financial status on academic success. Scholars have examined the effect of both family financial conditions and the amount of financial aid received on decisions to attend college and, once there, to continue enrollment through graduation, which researchers in this field call persistence. Not surprisingly, higher family income and greater financial aid lead to higher enrollment and graduation rates (i.e., greater persistence).¹²⁹ This effect is strongest for students from low-income families, where the effects of family financial hardship and the amount of financial aid in the form of grants are especially important in determining college attendance and persistence.¹³⁰ Another important finding is that well-timed cash payments – in the study, the receipt

129. Professor Heckman's regressions also examine the effect of family income, and finds a positive and statistically significant relationship between family income and graduation rates.

130. See the following articles and the references therein. Melissa R. Witkow, Virginia Huynh, and Andrew J. Fuligni, "Understanding Differences in College Persistence: A Longitudinal Examination of Financial Circumstances, Family Obligations, and Discrimination in an Ethnically Diverse Sample," *Applied Developmental Science* 19(1) (2015), pp. 4-18; Susan Dynarski and Judith Scott-Clayton, "Financial Aid Policy: Lessons from Research," *Future of Children* 23(1) (2013), pp. 67-91 (also finding that educational outcomes are enhanced if financial aid rewards academic performance). Published research by Professor Heckman found that family income is an important factor affecting college attendance, although he found that financial constraints at the time of attendance are less important than the long-term benefits arising from growing up in a high-income household (Pedro Carneiro and James J. Heckman,

of earned income tax credits in the spring of a student’s senior year of high school – apparently increase the likelihood that a student from a low-income family will attend college.¹³¹ The implication of this research is that the cash stipends that college athletes now receive as part of their COA scholarship, and the extra cash that some athletes receive from SAF, benefits that are incidental to participation, and Pell Grants, are likely to improve their academic success.

144. Another important piece of economic evidence is current trends in graduation rates among D-I athletes. An interesting natural experiment occurred in 2015 when the NCAA cap on athletic scholarships was raised to COA, which caused the value of athletic scholarships to increase by \$2,000 to \$7,000 in cash payments at nearly all FBS schools and many other D-I institutions. For many class members, the 2015 changes caused their total compensation to rise substantially above COA. The defendants’ argument implies that such a substantial increase in cash compensation should have caused a substitution of effort towards athletics and away from academics, thereby causing graduation rates to fall. But in 2017, the

“The Evidence on Credit Constraints in Post–Secondary Schooling,” *Economic Journal* 112(482) (2002), pp.705–734). More recent work finds that the importance of short-term financial conditions is greater than Professor Heckman originally estimated and has increased (Christoph Winter, "Accounting for the Changing Role of Family Income in Determining College Entry," *Scandinavian Journal of Economics* 116(4) (2014), pp. 909-963). See also Bradford Chaney and Elizabeth Farris; “Survey on Retention at Higher Education Institutions,” *Higher Education Surveys Report*, Westat; 1995; Anne-Marie Nunez and Stephanie Cuccaro-Alamin, “First-Generation Students: Undergraduates Whose Parents Never Enrolled in Postsecondary Education,” *Statistical Analysis Report (NCES 1999-082)*, U.S. Government Printing Office, June 1998; and Frances K. Stage and Don Hossler, “Differences in Family Influences on College Attendance Plans for Male and Female Ninth Graders,” *Research in Higher Education*, Vol. 30(3) (October 2002), pp. 301-315.

131. Day Manoli and Nicholas Turner, “Cash-on-Hand and College Enrollment: Evidence from Population Tax Data and the Earned Income Tax Credit,” *American Economic Journal: Economic Policy*, Vol. 10, No. 2 (May 2018), pp. 242-71.

graduation rate among Division I football, men's basketball and women's basketball players was higher than in 2015, even though the graduation success rate in 2015 was higher than in any previous year.¹³²

145. More generally, in the past 15 years, graduation rates among athletes have increased substantially. During this period the NCAA tightened its academic eligibility rules, devoted more funds to academic support services, and created other new benefit programs for athletes (including SAF and benefits incidental to participation) that substantially increased the amount of compensation that they receive.¹³³ This longer term trend shows that greater compensation of college athletes cannot possibly have had a negative impact on their academic achievement.

146. The *Heckman Report* and the *Heckman Reply* contain statistical analyses of, among other things, the graduation rates of athletes. Professor Heckman's regressions shed no light on whether greater compensation of class members would affect their graduation rates. Hence Professor Heckman's regressions are irrelevant to assessing the validity of defendants' alleged procompetitive benefit of greater academic integration of college athletes.

147. Due to limitations of the available data, Professor Heckman cannot measure the effect of the amount of compensation of FBS football and Division I basketball athletes on academic success. Professor Heckman's data do not include the amount of financial aid that an athlete received while in college, which prevents him from testing whether greater compensation affects graduation rates. In addition, Professor Heckman's data are limited to the period in which the old GIA cap was in place, so he

132. "Trends in Graduation Success Rates and Federal Graduation Rates at Division I Institutions," NCAA Research Staff, November 2016, at http://www.ncaa.org/sites/default/files/2016RES_GSRandFedTrends-Final_sc_20161114.pdf, and November 2017, at http://www.ncaa.org/sites/default/files/2017D-IRES_Grad_Rate_Trends_FINAL_20171108.pdf.

133. For example, the precursor of SAF was created in 1999, so its origin corresponds with the beginning of the significant increase in graduation rates. Brian Burnsed, "Meeting the Needs of Student Athletes," August 22, 2012, NCAA, at <https://www.ncaa.com/news/ncaa/article/2012-08-20/meeting-needs-student-athletes>

cannot test whether graduation rates were affected by the change in NCAA compensation rules in 2015 that allowed students to receive cash stipends of several thousand dollars. The data also do not permit a test of whether partial scholarships that are awarded in sports other than football and basketball have a different effect on graduation rates than full scholarships. Finally, as Professor Heckman acknowledges,¹³⁴ available data do not enable him to know which sport an athlete played in college, so he infers whether an athlete is a football or basketball player from whether the athlete played either sport in high school, and for male athletes lumps both sports together. Thus, Professor Heckman's regressions do

134. *Heckman Reply*, pp. 33-35. Professor Heckman asserts that my “description of the classification [of athletes] is misleading” (p. 34) because I used an example of an athlete who played three sports. According to Professor Heckman, my example is misleading because neither he nor I know whether any athlete in the sample participated in basketball or football plus soccer and track because sport identifiers are not in the data, and most athletes “played only football or basketball (or both) or up to one additional... sport in high school” (pp. 34-35). These statements do not vitiate the point in the *Noll Declaration*, which is that Professor Heckman cannot reliably identify the athletes in his data set that played FBS football or Division I basketball and, therefore, are representative of the class members, and that the number of football players and basketball players in his sample is small. By assuming that anyone who played football or basketball in high school also played that sport in college, Professor Heckman risks over-counting the number of college athletes who played these sports. This concern is not trivial because, even with potential over-counting, the data contain few FBS football players and Division I basketball players. As stated in the *Heckman Reply* (p. 30), in the regressions in the *Heckman Report*, the number of male football and basketball players in Division I is 90 in one sample and 100 in the other, of which 40 and 50, respectively, are in FBS. Football players in FCS are irrelevant to this litigation, and neither Professor Heckman nor I know how many athletes in his sample are FCS football players. Neither of us knows how these numbers break down between football and basketball players, which means that we cannot know whether one sport accounts for most of these players, leaving the other sport with few representatives. Finally, the number of Division I women basketball players in the two samples is 30 and 40, respectively, or about one tenth of a player per Division I college and one player per Division I conference. Professor Heckman does not report the number of women basketball players in FBS, but it is 10 in one sample and 20 in the other. Moreover, the regressions in the *Heckman Reply* use a different method for identifying athletes, and with this method the number of men playing football or basketball is 20 for all of Division I and 10 for FBS, while the number of women basketball players in all of Division I is 10 in one sample and less than 10 in the other. These sample sizes are too small to produce a reliable test of the effect of participation in football or basketball on academic achievement.

not provide any insight into whether the amount of compensation that is received by an FBS football player or a Division I basketball affects that athlete's academic achievement.

148. In summary, defendants have no evidence other than self-serving statements by NCAA and university officials that an increase in the value of athletic scholarships will reduce the academic performance of college athletes. Research on the effects of financial status on academic achievement shows that giving cash to low-income students improves their academic performance. Recent trends in graduation rates among college athletes demonstrate that academic success has improved substantially as compensation of college athletes has increased.

Integration into Campus Life

149. The defendants assert that “providing student-athletes more than cost of attendance and allowable benefits would ‘distinguish’ them from other students and potentially ‘create a wedge between the student athletes and the regular student body, who are not receiving that type of compensation.’”¹³⁵ This statement seems to be based on the assumption that the “regular student body” receives scholarships that are comparable to a full COA athletic scholarship. Unless this were the case, a full COA scholarship would, alone, “distinguish” an athlete from other students and “create a wedge” between athletes and other students “who are not receiving that type of compensation.” In fact, “regular students” do not normally receive full COA scholarships, and the financial aid they do receive differs in many important ways from a full COA scholarship.

135. *Defendants' Summary Judgment Motion*, pp. 48-49, internal quotes from NCAA Vice President Kevin Lennon.

150. Need-based financial aid for “regular students” provides assistance up to the difference between COA and expected family contribution.¹³⁶ While most college students receive some financial aid, few receive financial aid equal to COA because their expected family contributions are not zero.

151. Moreover, financial aid for regular students is not just a grant like an athletic scholarship. The “net price” of college is COA less the sum of college tax benefits and grants that do not have to be repaid.¹³⁷ The latter includes scholarship awards, but it also includes jobs paid from the federal work-study program for low-income students whose financial need exceeds the cap on Pell Grants.¹³⁸ That is, low-income students who are not athletes often receive some of the financial aid that does not have to be repaid in the form of a job.

152. Most students face a significant “net price” of college. Some of the net price may be covered by other types of financial aid, such as student loans and other on-campus jobs. There also is no restriction on “regular students” that total financial aid from all sources be capped at COA. In particular, students can and some do hold campus jobs that bring their total payments to more than COA.

153. Some of the “net price” is usually paid by a student’s family. The greatest source of differences in financial status among college students is differences in the incomes and wealth of their families. Family income and wealth are the primary factors in determining expected family contribution, which in turn affects the amount of financial aid that a student can receive.

154. Finally, an important difference between athletes and “regular students” is that only the former are eligible for benefits from financial assistance programs that are available only to athletes. Defendants

136. “EFC Calculator,” College Board, at <https://bigfuture.collegeboard.org/pay-for-college/paying-your-share/expected-family-contribution-calculator>.

137. “Focus on Net Price, not Sticker Price,” College Board, at <https://bigfuture.collegeboard.org/pay-for-college/paying-your-share/focus-on-net-price-not-sticker-price>.

138. “Federal Work-Study Jobs Help Students Earn Money to Pay for College or Career School,” Office of Federal Student Aid, at <https://studentaid.ed.gov/sa/types/work-study>.

focus exclusively on athletic scholarships in excess of COA, but ignore that SAF and benefits incidental to participation also “distinguish” athletes from other students because the latter “are not receiving that type of compensation.”

155. Defendants’ fact witnesses do not mention these other sources of differences in financial status among students, let alone explain why a scholarship that goes even one penny above COA is more important than the difference between a full COA scholarship and a typical need-based scholarship, or than other sources of differences in financial status among students that are worth more than one penny, including other benefits that are available only to athletes. Nor do they provide any specific evidence, not even an example, of circumstances in which the earnings of professional athletes who remain on campus as enrolled students created a wedge between athletes and other members of the campus community.

156. Defendants’ economic experts assert that the value of athletic scholarships can affect integration into campus life, but they provide no evidence that student integration is affected by the amount of compensation of athletes. The *Elzinga Report* (pp. 38-43, 92-93) asserts that if the value of an athletic scholarship exceeded COA, athletes would not be integrated into campus life and others would have less interest in the school. Professor Elzinga’s only evidence for this claim is unsupported assertions by NCAA, conference, and university officials that are broadly consistent with his opinion. None of these witnesses has a basis for these opinions in any systematic study of student integration.

157. Professor Heckman tries to connect research on the “economics of identity” and the “economics of inequality aversion” to the compensation of athletes.¹³⁹ Identity refers to a feeling of membership and attachment to a group (like a campus community), and inequality aversion refers to one person’s well-being depending on the incomes of others in the same community.

158. After noting that the “academic literature” provides evidence that students benefit from identifying

139. *Heckman Reply*, pp. 19-21.

with a college team, Professor Heckman asserts that “actions that harm student-team identification and alumni-alma mater identification (such as deviation from the principles of amateurism) *may* negatively impact both current and former students...”¹⁴⁰ Professor Heckman later states that “changes to the amateur character of intercollegiate athletics *may* damage the identification of alumni with their alma mater, and may damage current students’ identification with their teams...”¹⁴¹ Professor Heckman also cites research on inequality aversion (including a form of envy, in which a person’s welfare is reduced if a neighbor experiences an increase in income). Professor Heckman states: “Benefits accrued to student-athletes according to athletic ability and/or their individual contribution to school revenues (however measured) *may* foster intra-team, inter-team, and intra-university conflict and resentment, thereby undermining what is arguably an important mission of a university – creation of a sense of community for the mutual benefit of its members.”¹⁴²

159. The research that Professor Heckman cites concludes that measures of identity with a college, including the college’s athletic teams, are associated with various indicators of student and alumni well-being, such as alumni donations, and that relationships among neighbors and among employees in the same firm can be adversely affected by greater differences in income. This research does not address the relationship between the amount of compensation of a college athlete, or even whether a college athlete receives an athletic scholarship or is a walk-on, and measures of student or alumni identity or harmony among members of the campus community. Hence, this research offers no insight into whether an increase in the compensation of student athletes would have any effect on the cohesion of the campus community.

140. *Ibid.*, p. 19 (emphasis added).

141. *Ibid.*, pp. 20-21 (emphasis added).

142. *Ibid.*, p. 27 (emphasis added).

Whereas there “*may*” be such a relationship, there also “*may not*” be such a relationship, and this research is of no help in choosing between these possibilities.

160. Professor Heckman focuses exclusively on payments to athletes as a source of variation in income on a college campus. As discussed above, payments and benefits from the college are not the only sources of differences among students in financial status, which is determined primarily by parental wealth or, in some cases, by student employment, including some athletes and other entertainers who attend college while pursuing lucrative professional careers.

161. One example that is not consistent with the hypothesis in the *Heckman Reply* that the financial success of an athlete undermines their relationship with others in the academic community is the experience of golfer Michelle Wie, who graduated from Stanford in 2012. Ms. Wie played professional golf during her entire period of enrollment as a student at Stanford and, in 2009, after two years of college, had total winnings on the LPGA tour of over \$900,000.¹⁴³ During her senior year, as her golf earnings topped \$2 million, Ms. Wie stated that she was not treated any differently than any other student on campus.¹⁴⁴ In another interview, Ms. Wie spoke warmly about being part of the campus community and characterized her time at Stanford as “the best 4½ years of my life.”¹⁴⁵

162. Another example is Katie Ledecky, a current rising junior at Stanford who was paid more than \$100,000 for her performance at the Olympics and who, at the conclusion of the women’s NCAA swimming season this spring, announced that for the rest of her time in college she would swim

143. “Official Money,” LPGA, at <http://www.lpga.com/statistics/money/official-money?year=2009>.

144. See the interview at <https://www.golfchannel.com/video/feherty-foursome-why-michelle-wie-chose-stanford-0/>.

145. Ron Kroichick, “The Education of Michelle Wie,” *Golf Digest*, March 12, 2012, at <https://www.golfdigest.com/story/gwar-michelle-wie-education>.

professionally, rather than for Stanford, while nevertheless remaining enrolled as a student. Ms. Ledecky's decision to turn pro was supported by her Stanford coach, and, despite turning pro, she continued to work out with her Stanford teammates and to live with five other members of the swimming team.¹⁴⁶ Before the end of Stanford's 2017-18 academic year, at her first pro swimming event, Ms. Ledecky broke a world record.¹⁴⁷ In June, Ms. Ledecky won two honors that are pertinent to assessing her integration into campus life: outstanding Academic All-American of the year in all of college sports from the College Sports Information Directors of America, and the Stanford Department of Athletics' award for "the athlete who attains the highest standards of athletic performance, leadership and academic achievement."¹⁴⁸ Ms. Ledecky has a 3.99 grade point average.

163. As successful as some students who are also professional athletes have been, their rewards are not as great as the compensation of many college coaches. That is, a much bigger source of income differences on many Division I campuses is the compensation of college football and basketball coaches. If income inequality has a substantial effect on the integration of the constituencies of a college, then coaching salaries would be an extremely important factor undermining integration.

164. In 2017, the highest paid public employee in 31 states was a college football coach, and in eight states the highest paid public employee was a college basketball coach, with coaches often earning several

146. Nick Zaccardi, "Katie Ledecky Turns Pro," *NBC Sports*, March 26, 2018, at <https://olympics.nbcsports.com/2018/03/26/katie-ledecky-turns-pro/>.

147. "Katie Ledecky Shatters Own World Record in First Pro Event," *USA Today*, May 17, 2018, at <https://www.usatoday.com/story/sports/olympics/2018/05/17/katie-ledecky-pro-event-1500-meter-freestyle/618722002/>.

148. "Katie Ledecky Wins Stanford Athletics' AI Masters Award," *Stanford News*, June 17, 2018, at <https://news.stanford.edu/thedish/2018/06/17/katie-ledecky-wins-stanford-athletics-ai-masters-award/>.

times as much salary as any other university employee, including the president.¹⁴⁹ Among the 39 coaches who are the highest paid state employees, eight earned more than \$5 million and 26 more earned more than \$2 million.

165. A plausible indicator of the absence of adequate integration of athletes into the campus community is the failure of a college to implement the NCAA's academic integrity rules to the effect that athletes must be students in good standing who are making adequate progress towards the degree of their choice. In recent years, whether athletes are free to pursue their academic interests or, in the extreme, are steered into easy courses (perhaps fake) to keep them academically eligible, has become an important issue at many colleges.

166. For example, Josh Rosen, the UCLA star quarterback in 2017 who was the 10th pick in the 2018 NFL draft, stated that while he loved school (he was an economics major), "football really dents my ability to take some classes that I need. There are a bunch of classes that are offered only one time. There was a class this spring I had to take, but there was a conflict with spring football... Look, football and school just don't go together... Trying to do both is like trying to do two full time jobs... Human beings don't belong in school with our schedules. No one in their right mind should have a football player's schedule, and go to school. It's not that some players shouldn't be in school; It's just that universities should help them more—instead of finding ways to keep them eligible."¹⁵⁰

167. Rosen's complaint is reflected in the numerous cases that have arisen in recent years of academic misconduct by universities to keep athletes academically eligible. Since August 2015 (when the new

149. "Who's the Highest Paid Person in Your State?" *ESPN*, March 20, 2018, at http://www.espn.com/espn/feature/story/_/id/22454170/highest-paid-state-employees-include-ncaa-coaches-nick-saban-john-calipari-dabo-swinney-bill-self-bob-huggins.

150. Josh Hayes, "Josh Rosen Q&A: UCLA QB on Injuries, NCAA and Post-NFL Goal to 'Own the World,'" *Bleacher Report*, August 8, 2017, at <http://bleacherreport.com/articles/2722587-josh-rosen-qa-ucla-qb-on-injuries-ncaa-and-post-nfl-goal-to-own-the-world>.

scholarship rules were implemented), the following universities have been put on NCAA probation for engaging in academic misconduct involving Division I football and basketball players. These infractions include having people take exams and write papers for athletes, forging academic records, or steering athletes into fake courses. The schools involved are: California State at Northridge (men's basketball¹⁵¹), Georgia Southern (football¹⁵²), Louisiana Lafayette (football¹⁵³), University of Mississippi (women's basketball¹⁵⁴ and football¹⁵⁵), Notre Dame (football¹⁵⁶), Pacific (men's basketball¹⁵⁷), Southeast Missouri State (men's basketball¹⁵⁸), Southern Methodist (men's basketball¹⁵⁹), Southern Mississippi (men's

151. "Remanded California State University, Northridge Public Infractions Decision," December 7, 2016, at <https://web3.ncaa.org/lstdbi/search/miCaseView/report?id=102690>.

152. "Georgia Southern Placed on Two-Year Probation, Loses Scholarships for NCAA Violations," *ESPN*, July 8, 2016, at http://www.espn.com/college-football/story/_/id/16860140/georgia-southern-placed-two-year-probation-loses-scholarships-ncaa-violations.

153. "NCAA Releases Ruling on LA Lafayette Violations," *News Star*, January 12, 2016, at <http://www.thenewsstar.com/story/sports/college/2016/01/12/ncaa-releases-ruling-ull-violations/78687430/>.

154. "Violations Found in Ole Miss Women's Basketball and Track Programs," NCAA, October 7, 2016, at <http://www.ncaa.org/about/resources/media-center/news/violations-found-ole-miss-women-s-basketball-and-track-programs>.

155. "University of Mississippi Public Infractions Decision," December 1, 2017, at <https://web3.ncaa.org/lstdbi/search/miCaseView/report?id=102650>.

156. "Notre Dame Must Vacate Football Wins After Academic Violations by Trainer," *USA Today*, November 22, 2016, at <https://www.usatoday.com/story/sports/ncaaf/2016/11/22/notre-dame-ncaa-violations-student-trainer/94280000/>.

157. "University of the Pacific Public Infractions Decision," September 20, 2017, at <https://web3.ncaa.org/lstdbi/search/miCaseView/report?id=102636>.

158. "Southeast Missouri State University Public Infractions Decision," March 10, 2017, at <https://web3.ncaa.org/lstdbi/search/miCaseView/report?id=102598>.

159. "SMU Commits Men's Basketball and Golf Violations," NCAA, September 29, 2015, at <http://www.ncaa.org/about/resources/media-center/news/smu-commits-men-s-basketball-and-golf-violations>.

basketball¹⁶⁰) and Syracuse (football, men's basketball¹⁶¹).

168. Another academic fraud case involved North Carolina. Numerous football and basketball players were given credit for enrolling in courses that essentially did not exist in that students were assigned little or no work and were required to put forth little or no effort to receive a passing grade. The university's commissioned investigation found that academic credit for fake courses had been given for eighteen years, that nearly half of the students enrolled in these courses were college athletes, that roughly 2/3 of these athletes played football, men's basketball, or women's basketball, and that academic advisers in the Department of Athletics steered college athletes into these courses to keep them academically eligible.¹⁶² In the NCAA's investigation, North Carolina renounced the findings of its own investigation, denied that NCAA rules had been violated because these courses also were taken by some students who were not athletes, and asserted that the content and quality of generally available courses was outside the NCAA's jurisdiction.¹⁶³ The NCAA largely agreed with North Carolina on the jurisdictional issue, and ended up penalizing the university only for the actions of one person with respect to members of the women's basketball team. This case exposes an enormous loophole in the NCAA's rules in that academic fraud cannot be punished if the same fraud is committed on some other students as well as to athletes.

160. "Former Southern Mississippi Men's Basketball Coach Acted Unethically," NCAA, April 8, 2016, at <http://www.ncaa.org/about/resources/media-center/news/former-southern-mississippi-men-s-basketball-coach-acted-unethically>.

161. "Syracuse Did Not Control Athletics; Basketball Coach Failed to Monitor," NCAA, March 6, 2015, at <http://www.ncaa.org/about/resources/media-center/news/syracuse-did-not-control-athletics-basketball-coach-failed-monitor>.

162. Kenneth L. Weinstein, A. Joseph Jay III and Colleen Depman Kukowski, *Investigation of Irregular Classes in the Department of African and Afro-American Studies at the University of North Carolina at Chapel Hill*, October 16, 2014, pp. 3-4, at <http://3qh929iorux3fdpl532k03kg.wpengine.netdna-cdn.com/wp-content/uploads/2014/10/UNC-FINAL-REPORT.pdf>.

163. "University of North Carolina at Chapel Hill Public Infractions Decisions," October 13, 2017, at <https://web3.ncaa.org/lstdbi/search/miCaseView/report?id=102636>.

169. Notwithstanding the continued rise in graduation rates among Division I athletes, these rates are lowest for football, and below average for men's and women's basketball. The academic fraud cases listed above arise from the desire to keep college athletes eligible who are not receiving an adequate college education, let alone making progress toward a degree. The NCAA's Commission on College Basketball recently characterized the situation as follows: "The NCAA's investigative and enforcement functions were designed for a simpler time, when rules violations did not put so much at stake. As a result, the NCAA as an enforcement entity has little credibility with the public and its members, and what it has continues to dwindle. There are multiple cases of compromised academic standards and institutional integrity to keep the money and talent flowing."¹⁶⁴ As an economic matter, the gap between the revenue that athletes generate in FBS football and basketball and the compensation of those athletes enhances the incentive to engage in academic fraud to keep athlete's eligible that compromises a college's academic mission and overwhelms the NCAA's enforcement efforts.

170. An excellent example of the abandonment of the mission of college in pursuit of success and profit from college sports is the open use of "one and done" players. "One and done" refers to players who, because the NBA does not permit players to be drafted until they are 19 years old, attend college only for a year with the intention of leaving college after one year to turn professional. According to the NCAA's Commission on College Basketball, "One-and-done has played a significant role in corrupting and destabilizing college basketball... Elite high school players with NBA prospects and no interest in a college degree should not be 'forced' to attend college, often for less than a year."¹⁶⁵ Of course, colleges are not blameless here because they actively recruit players who are known to be planning to drop out of college as soon as their first college basketball season comes to an end.

164. Commission on College Basketball, "Report and Recommendations to Address the Issues Facing Collegiate Basketball," April 2018, p. 2.

165. *Ibid.*, p. 3.

171. One of the prime examples of a university that has recruited many “one-and-done” players is Kentucky, and one of the people that Professor Elzinga interviewed for his expert report was the Director of Athletics at Kentucky, Mitch Barnhart. Professor Elzinga apparently did not ask Mr. Barnhart any questions about the publicly stated policy of Kentucky’s basketball coach, John Calipari, to recruit “one-and-done” players.¹⁶⁶ How much academic progress do these players make in their time at Kentucky (what fraction even finish their freshmen year)? Does public awareness that these players have no intention of being college students adversely affect interest in the basketball team? Coach Calipari defended the “one-and-done” system by pointing out that “they can come back and finish up!”¹⁶⁷ Professor Elzinga could have inquired about the fraction of Kentucky players who, after leaving school after their freshman or sophomore years, returned to college to earn their degrees.

172. Professor Elzinga also did not ask the President of the University of Texas about academic advising of athletes at his university. An investigation of academic pursuits of athletes at Texas found no NCAA violations, but did find that academic advisers at Texas were steering athletes away from challenging courses and, in some cases, away from college majors that corresponded to their principal academic interests.¹⁶⁸ Professor Elzinga’s notes from his interview do not indicate that he questioned Dr. Fenves about whether steps have been taken to stop the Office of Athletics Student Services at Texas from steering athletes away from challenging courses and majors.

166. “By the Numbers: How Kentucky’s One-and-Dones Have Fared in NBA,” *Sports Illustrated*, April 11, 2015, at <https://www.si.com/nba/2015/04/11/karl-anthony-towns-kentucky-draft-one-and-dones-john-calipari-success-anthony-davis>.

167. “John Calipari on Coaching Extreme Talent, One-and-Dones and His All-NBA Team,” *Bleacher Report*, February 15, 2017, at http://bleacherreport.com/articles/2691798-john-calipari-on-coaching-extreme-talent-one-and-dones-and-his-all-nba-team?utm_source=facebook.com&utm_medium=referral&utm_campaign=programming-national.

168. “Report that Clears UT Athletics of Cheating Still Raises Red Flags,” *Dallas Observer*, January 14, 2016, at <http://www.dallasobserver.com/news/report-that-clears-ut-athletics-of-cheating-still-raises-red-flags-7931946>.

173. The discussion by the defendants and their witnesses of the integration of athletes into campus life focuses on only one aspect of this issue: whether increasing the compensation of athletes will harm their academic progress and attenuate the relationship between athletes and other members of the campus community. But the recent history of college sports is replete with much more direct and significant examples of actions and policies at colleges that directly undermine the academic integrity of the institution. Unlike the issues of the academic integration of students that the defendants raise, which are not supported by any reliable, objective information, direct attacks on academic integrity in pursuit of athletic success are well documented, as is the NCAA's failure to prevent them. The defendants and their witnesses give no sign that they even consider that academic fraud is a serious threat to academic integrity and that the NCAA's steadfast efforts to punish vigorously even minor transgressions of its limits on benefits to athletes contributes to the incentive to engage in academic fraud.

174. Professor Elzinga also claims that the effect of compensation in excess of the COA cap on the integration of athletes into campus life is a "negative externality."¹⁶⁹ Professor Elzinga claim is incorrect. An externality refers to the effect of a transaction on others who are not parties to it. The relevant community with respect to the integration of athletes is the campus, and integration of athletes on one campus does not depend on how much athletes at another campus are being compensated. Hence, achieving this procompetitive benefit does not require collective action by all colleges.

175. With respect to academic performance, the defendants' hypothesized effect is that greater compensation causes an athlete to devote less time to academics. This outcome, if it were true, is the result of private actions by a college to compensate an athlete and a student to respond to the incentive to succeed as an athlete. This hypothesized academic effect is experienced by the parties to the transaction, which are the athlete and the college. Academic performance at one college is not affected by the

169. *Ibid.*, pp. 25-26.

compensation of athletes at another college and so does not create an effect that is external to the parties to the transaction. In short, a Harvard athlete's grades are not affected by the compensation paid to an athlete at Stanford. That is, Katie Ledecky's pay for her Olympic performance and her earnings from pro swimming since she turned professional this spring are not likely to cause an academic crisis among Harvard athletes.

176. Note that defendants' alleged procompetitive benefit concerning academic achievement is distinct from the incentive that colleges have not to take sufficiently into account the academic side of an athlete's campus life. Academic fraud, for example, reflects the powerful incentive to keep a good athlete eligible despite poor academic performance. While this problem is less severe if athletes receive greater compensation, as explained above, there remains a legitimate role for the NCAA or other governing body to set and to enforce academic standards for college athletes.

177. Likewise, a college creates the campus community through the arrangements that it makes with members of that community. As a result, the college experiences all of the effects of its transactions with college athletes on the social integration of its community. Professor Heckman's concepts of identity and inequality aversion apply within a specific college community. In no sense does the argument that underpins the objective of social integration of athletes contemplate that social integration on one campus depends on the compensation of athletes at colleges in other conferences. Each college, in deciding how to compensate athletes (as well as how to compensate its other employees and how to allocate financial aid to its students who are not athletes) experiences all of the consequences of this decision with respect to the quality of life on its own campus.

178. If integration of athletes into campus life were the only procompetitive benefit of restrictions on compensation of athletes on a specific campus, there would be no genuine external effect to be taken into account through coordinated action by colleges. As explained elsewhere in this testimony, intervention

by the NCAA (or any other organization) to disturb the transactions between a college and its athletes for the purpose of achieving better integration of athletes into campus life is (at best) paternalistic and possibly misguided in that it is based on the assumption that private parties in a competitive market will not negotiate an agreement that is in their own best interest and that an external entity possesses superior knowledge on what the best agreement should be. In this case, decentralization of decisions about compensation all the way to individual colleges is sufficient to achieve integration of athletes into the campus community.

Less Restrictive Alternatives

179. The defendants have not offered any reliable economic evidence that the current restrictions on compensating college athletes have procompetitive benefits. Nevertheless, I have been asked to assume in this part of my testimony that such procompetitive benefits exist and to analyze whether less restrictive alternatives to the challenged NCAA rules could be adopted that would provide these same benefits. My conclusion is that such less restrictive alternatives exist.

180. The first task in carrying out this assignment is to identify how the market for college athletes who play FBS football and Division I basketball would work if the plaintiffs were granted the relief that they seek. The defendants persistently mischaracterize the goal of the plaintiffs as seeking to create a standard labor market for professional athletes who play for colleges, are paid individually negotiated salaries, and are not students.¹⁷⁰ This characterization is grossly inaccurate. My understanding is that the plaintiffs

170. Professor Heckman mischaracterizes this outcome as a “spot” market for labor. I am sure that as a distinguished labor economist, Professor Heckman knows that sports labor is transacted in a matching market with long-term contracts, as is the case now for college athletes. Among the terms in the contractual agreement are academic and behavioral requirements that are imposed on students who play on a college team, regardless of whether they receive an athletic scholarship. Moreover, in all sports except football and basketball, compensation terms are

seek an injunction against enforcing current NCAA rules that restrict the benefits that a college athlete can receive for participating in FBS football and Division I basketball. This relief does not require or even contemplate the outcome described by the defendants, which is to convert college conferences to professional minor leagues or to take the “college” out of college sports.

181. The defendants’ alleged procompetitive benefits can be recast as goals for structuring the system of compensation for athletes. That is, college athletes should be genuine students who participate in college sports for an amount of time that is reasonably needed to complete an undergraduate degree, college athletes should have high success in achieving this academic goal, and college athletes should be well-integrated into the campus community.

182. The relief that plaintiffs request would not stop the defendants from retaining and enforcing other rules that serve these purposes and that are not challenged in the *Complaints*, such as: (1) Requiring that college athletes be students in good standing who are making normal progress towards a degree; (2) Limiting the years of eligibility of college athletes; (3) Placing restrictions on the behavior of college athletes, coaches, other university officials, and people who are not associated with the university but who are interested in its athletics program; (4) Establishing limits on roster sizes and the number of scholarships in each sport; (5) Mandating that FBS and Division I members field a minimum number of intercollegiate athletic teams; and (6) Regulating recruitment of student athletes. Moreover, the proposed relief would not prevent a member school or even a conference from unilaterally adopting the current NCAA rules to limit remuneration and other benefits to college athletes. Plaintiffs seek only to prevent collusion on compensation of athletes among conferences, not to prevent each conference from having

individually negotiated in that schools divide their allotted scholarships into partial scholarships for a greater number of students than the scholarship limit. The only issue at stake in this litigation is the subset of the market rules that restrict or otherwise control the amount of compensation that an FBS football player or a Division I basketball player can receive.

rules about such compensation.

183. This section discusses two less restrictive alternatives to current NCAA restrictions on compensation for students who play FBS football or Division I basketball. The first, “Conference Autonomy,” would decentralize the responsibility for making rules about allowed compensation and benefits to individual conferences in Division I. The second, “Procompetitive NCAA Compensation Rules,” consists of policies on compensating class members that the NCAA could adopt and enforce that would preserve competition for college athletes and that are better targeted than current rules at maintaining demand for college sports and integrating athletes into campus life.

Individual Conference Autonomy

184. One less restrictive alternative to the status quo is for the college athletic system to operate as it did during the first half of the 20th Century, when each conference adopted and enforced its own compensation rules. In the current system, the first line of enforcement responsibility is the school itself. NCAA members are required to have on-campus offices that educate athletes and coaches about NCAA rules and that monitor compliance with these rules. Infractions cases often are initiated by self-reported violations and are concluded by adopting the punishment that the college recommends and imposes on itself. The second line of defense is the conference, which also investigates reported violations and imposes punishments. Thus, the institutions for self-governance among conferences with respect to rules regarding the compensation of athletes already are in place.

185. An important implication of the relief that the plaintiffs actually seek, as opposed to defendants’ mistaken characterization of it, is that if a conference believed that the popularity of FBS football and Division I basketball would be eroded by increasing compensation of college athletes by even \$1 more

than is currently permitted, that conference independently could adopt compensation rules that are *essentially the same as the current NCAA rules* as long as each conference adopts these rules unilaterally.

186. Professor Heckman did not examine this alternative to the status quo. The *Heckman Reply* includes a discussion about the “equilibrium effects” of the plaintiffs proposed rule changes,¹⁷¹ but this discussion is predicated on the assumption that current NCAA restrictions are replaced by an unregulated market with individually negotiated wages for athletes who are not students, not one in which conferences adopt their own rules. Professor Heckman also testified that he could not come to any conclusion about the post-injunction world, whether it would be positive or negative or neutral.

187. Before the NCAA enforced compensation rules, conferences played this role. During the period when conferences made and enforced compensation rules, college football and men’s basketball were played by students and became popular and commercially successful. Today, some Division I conferences still limit compensation to the old GIA cap. The Ivy League still prohibits athletic scholarships while continuing to compete in Division I against conferences that award full COA scholarships. The Ivy League, not the NCAA, enforces this stricter rule. Thus, we know from history and current practice that the “equilibrium” is one in which college conferences can and do regulate themselves.

188. The *Elzinga Report* did not consider the possibility of full conference autonomy.¹⁷² In writing his first report, Professor Elzinga did not study, and had no opinion about, whether allowing each conference,

171. *Heckman Reply*, pp. 18-28. Almost all of the analysis in this section deals with whether the NCAA’s current restrictions have anticompetitive effects that cause harm to class members, such as the claim that some college athletes would lose their scholarships or be paid less if other athletes received more compensation. These issues were dealt with in my class certification report, and I do not repeat them here because I understand that further testimony on these issues is not sought by the court.

172. *Deposition of Kenneth G. Elzinga*, April 27, 2017, at pp. 171-72, 183.

acting independently, to set its own rules regarding compensation for college athletes would be more desirable than the current rules.¹⁷³

189. The *Elzinga Rebuttal* responds to the discussion of less restrictive alternatives in the report by Professor Daniel Rascher.¹⁷⁴ The *Elzinga Reply* responds to the discussion of less restrictive alternatives in the *Noll Declaration*.¹⁷⁵ Neither of these reports contains any empirical evidence to support their assumptions and theoretical arguments, and both reports ignore historical and contemporary information that is inconsistent with Professor Elzinga's arguments.

190. Like Professor Heckman, the *Elzinga Reply* chastises the *Noll Declaration* for not taking into account "the potential consequences of implementing this regime."¹⁷⁶ Specifically, the *Elzinga Reply* states that the *Noll Declaration* assumes that, with decentralization of making and enforcing compensation rules, college athletes would continue to have the same interactions with others in the campus community and that the demand for college sports would be unchanged.¹⁷⁷ He provides no evidence as to why this would not be the case and he ignores economic evidence that supports the conclusion that conference autonomy would not lead to compensation rules that undermine the demand for college sports or adversely affect the integration of college athletes into campus life.

191. The *Elzinga Rebuttal*¹⁷⁸ and the *Elzinga Reply*¹⁷⁹ briefly assert that the decentralization of rule-making about compensating athletes would not fully deal with "negative externalities" that arise when

173. *Deposition of Kenneth G. Elzinga*, April 27, 2017, pp. 171-72.

174. *Elzinga Rebuttal*, pp. 52-62.

175. *Elzinga Reply*, pp. 23-27.

176. *Ibid.*, p. 23.

177. *Ibid.*, pp. 25-26.

178. *Ibid.*, pp. 23-24.

179. *Elzinga Reply*, p. 24.

one college increases its compensation to the level that would make its athletes professionals without specifically defining these negative externalities. None of Professor Elzinga's reports state which specific "negative externalities" would not be taken into account by decentralization of decision making about compensation of athletes to individual conferences. For example, the *Elzinga Reply* asserts that one possible response to decentralization is that the NCAA retains its current structure despite differences among conferences in compensation rules, but in this case conferences with lower compensation "would suffer from the negative externalities created by the conferences that are less protective" of amateurism.¹⁸⁰

192. The vagueness in the reference to negative externalities is important because Professor Elzinga does not identify defendants' alleged two remaining procompetitive benefits as among the negative externalities that decentralization of decision-making to conferences would not fully take into account. The problem here is that the purported negative externalities that underpin the alleged procompetitive benefits apply to actions by schools, but not necessarily by conferences.

193. The *Elzinga Rebuttal* and the *Elzinga Reply* discuss two alleged examples of changes in the operation of college sports that might arise if the NCAA eliminated the COA cap on the compensation of college athletes. According to Professor Elzinga, in both of these examples, decentralized decisions by conferences would not adequately take into account the asserted negative externalities arising from excessive compensation.

194. Professor Elzinga's first example assumes that the current conference structure would continue to exist, but that conferences will adopt different compensation rules. Professor Elzinga then argues that a conference that compensates athletes above COA (e.g., the Pac-12) would recruit better athletes, field better teams, and, therefore, gain a competitive advantage over another conference that does not (e.g., the

180. *Ibid.*

Big Ten). Professor Elzinga then incorrectly asserts that preventing a conference from gaining this advantage is a procompetitive benefit.¹⁸¹

195. Professor Elzinga's second example is that schools might reorganize themselves into conferences with different rules regarding compensation of athletes.¹⁸² Professor Elzinga asserts that this latter reorganization would be costly,¹⁸³ would undermine integration of athletes into the campus community,¹⁸⁴ and would cause reduced demand for college sports because colleges that adopt a particular compensation policy "would have fewer rivals they can play against."¹⁸⁵

196. Professor Elzinga offers no evidence that either of these examples are plausible. Indeed, Professor Elzinga simply ignores empirical evidence that both examples are implausible.

197. Professor Elzinga's first example is based on the assumption that the structure of the NCAA (including existing conferences) remains unchanged but conferences adopt different compensation rules, causing conferences that pay greater compensation to be more successful than conferences that pay less. Thus, according to Professor Elzinga, if the Pac-12 increased its compensation of athletes but the Big Ten did not, the Pac-12 would field better teams and take business away from the Big Ten.

198. Professor Elzinga's second example also assumes that conferences adopt different limits on compensating athletes, but that the current NCAA structure is replaced by one in which colleges stop playing games against schools in conferences with different compensation policies, thereby undermining

181. *Ibid.*

182. *Ibid.*, pp. 24-25.

183. *Ibid.*, p. 25.

184. *Ibid.*, p. 26. The actual statements are that decentralization is a valid less restrictive alternative only if student-athletes "would continue to have the same interactions with other members of their universities" and "alumni will continue to be attracted to their *alma maters* to the same degree even if the athletes are professionalized and the contests become pay-for-play."

185. *Ibid.*, p. 25.

interest in college sports by reducing the number of teams that each school can play and that compete for the national championship for each group of conferences.

199. One problem with these examples is that they are based on the assumption that two Power Five conferences (Pac-12 and Big Ten) will respond very differently to the elimination of the COA cap. Professor Elzinga offers no explanation for why the responses of these conferences would differ so dramatically and would be so different from the responses of these same conferences to the replacement of the old GIA cap by the COA cap in 2015.

200. Another problem with these examples is that they are inconsistent with the fact that Division I already includes schools that offer no athletic scholarships, schools that still offer scholarships at the old GIA cap, as well as schools that offer total compensation that is substantially in excess of COA for many athletes. Moreover, among schools that do offer COA scholarships, stipends for miscellaneous expenses vary by thousands of dollars within the same conference. At present, despite these differences, colleges with highly varying compensation policies (like Harvard and Kentucky in men's basketball) still continue to play games against each other, and revenues among all types of schools and conferences have continued to grow after the diversity in compensation policies increased dramatically in 2015.

201. Professor Elzinga asserts that a conference is not sufficiently large to take adequately into account the negative effect on demand of exceeding current NCAA compensation restrictions. Importantly, this claim by Professor Elzinga is an *assumption*, not a *conclusion* derived from economic theory or empirical analysis. The negative externality on demand in the *Elzinga Report* assumes that, for example, football games of a Mountain West team (say, Wyoming) suffer the same loss in demand regardless of whether the college that raises its compensation of athletes above current limits is a conference rival (say, Colorado State, which is 65 miles away) or ACC power Clemson (1600 miles away).

202. The assumption that the negative demand effect will not be felt sufficiently in a conference is unjustified. College teams play most of their games against other conference members, and a team's intense rivals are mostly other conference members. Paying greater compensation can increase the quality of all teams in the conference, but cannot change the fact that some teams will do better than others in conference play. A conference has only one champion. End-of-season conference standings are the principle factor affecting whether a team plays in a bowl game or a post-season basketball tournament, and, if so, which one. While the conference champion and its closest conference competitors may experience a net gain in demand if their teams improve, most teams in the conference will continue to be also-rans that do not qualify for a major bowl game or are not contenders for the NCAA basketball championship. For this reason, a conference is sufficiently large to take into account a negative effect on demand of its compensation rules. If a conference proposed to adopt rules that allow members to pay compensation that significantly erodes demand, and if defendants' explanation of the cause of a reduction in demand is correct, the also-rans, which possess a majority of conference votes, would expect to suffer a loss in demand and so would oppose these proposed rules.

203. An additional problem with Professor Elzinga's examples is that the negative effect on demand that he assumes is a loss of business due to the superior quality of a competitor's product. In essence, Professor Elzinga's argument is that if the Pac-12 increases its compensation of college athletes, it will recruit better players than the Big Ten and, as a result, gain a competitive advantage.

204. This hypothetical effect is not a real negative externality, but is the mechanism by which competition works to deliver benefits to consumers.¹⁸⁶ Put another way, Professor Elzinga is claiming

186. Economists call the transfer of wealth from a monopolist to consumers that arises from increased competition a "pecuniary externality," but this transfer also is the standard measure of damages in an antitrust case in which the monopoly profits were acquired by anticompetitive

that increasing the compensation of athletes will induce more intense quality competition among conferences.¹⁸⁷ The alleged procompetitive benefit of current restrictions does not arise from reshuffling of business due to changes in the relative qualities of products under competition, but from an alleged reduction in demand among all colleges due to the existence of some athletes who are compensated by more than COA.

205. Far from being a procompetitive benefit, suppressing quality competition through cartel behavior is an anticompetitive harm. Loss of business due to the superior quality of a competitor's product is the mechanism by which competition works to deliver benefits to consumers. Professor Elzinga's switch of business from the Big Ten to the Pac-12, or from the subset of conferences that pays athletes more to the subset that not only pays less but stops playing the former, illustrates the economic argument that Professor George Stigler originally proposed to demonstrate the instability of price-fixing cartels.¹⁸⁸ The core idea is that a firm can agree to follow the cartel agreement to charge the monopoly price and earn its share of monopoly profits, or it can slightly cut its price, steal a great deal of business from other cartel members, and earn greater profits by obtaining a much larger share of the smaller total profit among all members of the cartel.¹⁸⁹ If the gain in sales volume is sufficiently large to offset the lower margin after the price reduction, cheating on the agreement increases the cheater's profit at the expense of other cartel members.

means, such as merger or collusion. By comparison, a "real negative externality" refers to a true cost of an economic activity that is imposed on others.

187. One cannot escape this problem by further assuming that the gain in quality of the Pac-12 is more than offset by the quality loss of the Big Ten. To argue that the net effect is negative is implicitly to argue that competition for athletes would disrupt competitive balance, which has been ruled out as a procompetitive benefit in this litigation and has been thoroughly discredited by scholarly research in the economics of sport.

188. George J. Stigler, "A Theory of Oligopoly," *Journal of Political Economy* 62(1) (1964), pp. 44-61.

189. A cartel of buyers agrees to maintain an artificially low collusive price for an input, and cheating in such a cartel consists of paying slightly too much to obtain more inputs, expand

206. The substance of Professor Elzinga's example is that, under rules that restrict compensation of college athletes, a college or conference has an incentive to pay more than the cartel agreement in order to improve the quality of its product. To the extent that the cartel succeeds in preventing colleges from responding to this incentive, the effect is anticompetitive harm, not a procompetitive benefit of the cartel.

Alternative Procompetitive NCAA Compensation Rules

207. Another alternative to the NCAA's current restrictions on compensation of college athletes is for the NCAA to adopt new, less restrictive rules and policies that more effectively promote the popularity of college sports and the integration of athletes into campus life while also promoting more competition in the relevant markets for college athletes. The core idea is that the NCAA would only prohibit cash compensation above COA that is unrelated to educational expenses or participation in academic life, excluding performance in athletics as a basis for compensation (except for existing participation benefits that the NCAA has already concluded do not adversely impact its alleged amateurism or integration objectives), and would adopt other rules designed to encourage academic integration and to permit greater compensations for a wide variety of benefits related to being a student and achieving academic success. This section describes a few examples.

208. Defendants and their economic experts claim that if an athletic scholarship is more valuable, a student has an incentive to switch time and effort from academics to athletics in order to retain their athletic

supply, and earn greater profits by charging a slightly lower price-cost margin on a much larger sales. "When owners of major league baseball teams collude in dealing with free agents, when universities meet to avoid a bidding war for the most desirable students, when large manufacturing or processing facilities fix purchase prices of raw materials at artificially low levels, and when dealers rig the bids in public auctions, monopsony power is being exercised." Publicity blurb for Roger D. Blair and Jeffrey L. Harrison, *Monopsony: Law and Economics*, Princeton University Press, 1993. See also Roger G. Noll, "Buyer Power and Economic Policy," *Antitrust Law Journal*, Vol. 72, No. 2 (2005), pp. 311-40.

scholarship. As discussed elsewhere, this argument ignores other countervailing factors and is empirically unsupported, but if such a problem exists, the less restrictive solution is to alter the incentive structure to favor academic success.

209. As economists, Professors Elzinga and Heckman should recognize that this unsubstantiated theoretical problem has already been addressed by the Power Five conferences with their adoption of multi-year scholarships that a coach cannot cancel because an athlete's performance is unsatisfactory. If colleges were genuinely concerned that greater compensation for college athletes would cause a substitution of athletic effort for academic effort, the NCAA could make multi-year scholarships mandatory throughout FBS football and Division I basketball, rather than just permit them.

210. The NCAA also could allow colleges to award bonuses to FBS football players and Division I basketball players for academic performance.¹⁹⁰ For example, the NCAA could allow colleges to increase the value of a scholarship in each year in which an athlete makes normal progress towards a degree. Likewise, colleges could be permitted to add an additional bonus that is based on the amount by which the athlete's grade point average exceeds the minimum requirement for retaining academic eligibility.¹⁹¹

211. Because colleges are required to monitor the academic progress of their athletes to comply with academic eligibility requirements, awards for academic success would not require significant implementation costs. Moreover, adopting a less restrictive system in which educational objectives are incentivized through new benefits that the schools would be free to adopt would be more effective than the current compensations rules in accomplishing the objective of improving the integration and academic

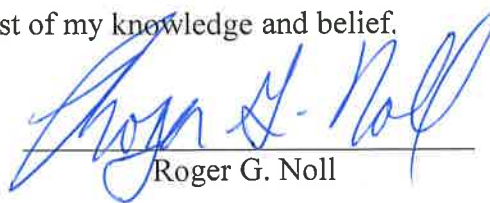
190. Former NFL Commissioner Paul Tagliabue recently made a similar proposal to the Knight Commission on Intercollegiate Athletics. Michael Smith, "Tagliabue: College Model Requires New Thinking," *SPORTSBUSINESS JOURNAL*, Jan. 9-15, 2017, at <https://www.sportsbusinessdaily.com/Journal/Issues/2017/01/09/Colleges/Tagliabue.aspx>.

191. As an illustration, imagine a bonus of \$100 for each tenth of a point over the eligibility floor. Thus, if athletes are required to maintain a grade point average of 2.0 to remain eligible for sports, then an athlete with a 4.0 average for the year would be paid a bonus of \$2,000.

success of class members.

212. In summary, even if defendants' alleged procompetitive justifications are assumed to be valid, these objectives can be accomplished at least as effectively by less restrictive rules than the NCAA's current restrictions on the compensation of college athletes.

I declare that the foregoing is true to the best of my knowledge and belief.



Roger G. Noll

Executed at Stanford, California, July 3, 2018

Exhibit 168(a):

CURRICULUM VITAE
ROGER G. NOLL

PERSONAL

Date and Place of Birth: March 13, 1940, Monterey Park, California

EDUCATION

East High School, Salt Lake City, Utah, 1958
B.S. (Math, Honors), California Institute of Technology, 1962
A.M., Ph.D. (Economics), Harvard University, 1965, 1967

SCHOLARSHIPS, FELLOWSHIPS AND AWARDS

National Merit Scholarship 1958-62
National Defense Education Act Fellowship 1962-66 (declined)
Harvard Prize Fellowship 1962-63
National Science Foundation Fellowship 1963-64
Guggenheim Fellow 1983-84
Rhodes Prize for Undergraduate Teaching, Stanford University, 1994
Distinguished Service Award, Public Utilities Research Center, University of Florida, 2001
Distinguished Lecture Award, Brookings-AEI Joint Center on Regulation and Markets, 2006
Alfred E. Kahn Distinguished Career Award, American Antitrust Institute, 2012
Distinguished Member Award, Transportation and Public Utilities Group, American Economic Association, 2013
Economist of the Year, Global Competition Review, 2015
Outstanding Antitrust Litigation Achievement Award in Economics, American Antitrust Institute, 2015

POSITIONS HELD

Instructor, California Institute of Technology, 1965-67
Assistant Professor, California Institute of Technology, 1967-69
Senior Staff Economist, Council of Economic Advisers, 1967-68
Associate Professor, California Institute of Technology, 1969-71
Senior Fellow and Co-director, Studies in the Regulation of Economic Activity, Brookings Institution, 1970-73
Professor, California Institute of Technology, 1973-82
Visiting Professor, Graduate School of Business, Stanford University, 1976-77
Chair, Division of the Humanities and Social Sciences, California Institute of Technology, 1978-82
Reuben Gustavson Lecturer, University of Chicago, April 1981
Institute Professor of Social Sciences, California Institute of Technology, 1982-84
Donald Gilbert Memorial Lecturer, University of Rochester, December 1982
Fellow, Center for Advanced Study in the Behavioral Sciences, 1983-84
Professor of Economics, Stanford University, 1984-2006 (*Emeritus* 2006-)
Visiting Scholar, Hoover Institution, 1984-85
Professor by Courtesy, Department of Political Science, Stanford University, 1985-2006
Professor by Courtesy, Graduate School of Business, Stanford University, 1986-2006
Veblen-Clark Lecturer, Carleton College, May 1986
Director, Public Policy Program, Stanford University, 1986-2002

Positions, cont'd

David Kinley Lecturer, University of Illinois, May 1987
Sunderland Fellow, Law School, University of Michigan, Fall 1988
Morris M. Doyle Centennial Professor in Public Policy, Stanford University, 1990-2002
Jean Monnet Professor, European University Institute, Spring 1991
Associate Dean, Humanities and Sciences, Stanford University, 1991-92
Visiting Professor, University of California, San Diego, 1993
Visiting Fellow, Brookings Institution, 1995-96
Nonresident Senior Fellow, Brookings Institution, 1996-99

Director, American Studies Program, Stanford University, 2001-02
Visiting Scholar, London School of Economics, Spring 2001 and Spring 2002
Senior Fellow, American Antitrust Institute, 2002-
Director, Stanford Center for International Development, 2002-06
Kim Thomas Lecturer, Whittier College, 2010

TEACHING EXPERIENCE

Undergraduate: Introductory Economics, Intermediate Microeconomic Theory, Introduction to Econometrics, Antitrust and Regulation, Economic History of Medieval Europe, History of Economic Thought, Economic Policy Analysis, Economics of Sports, Political Economy of the West

Graduate: Antitrust and Regulation, Economic Policy Analysis, Applied Microeconomic Theory, Experimental Economics

RESEARCH INTERESTS

Antitrust and Regulation, Technology Policy, Political Economics, Political Economy of Law

MEMBERSHIP ON BOARDS AND COMMITTEES

President's Task Force on Communications Policy (CEA Staff Representative), 1967-68
President's Task Force on Suburban Problems, 1968
President's Committee on Urban Housing, 1968
President's Task Force on Public Broadcasting, 1968
Department of Commerce Technical Advisory Board Panel on Venture Capital, 1968-69
Committee on the Multiple Uses of the Coastal Zone, National Council on Marine Resources and Engineering, 1968
Secretary, President's Interagency Task Force on Income Maintenance, 1968
Task Force on Application of Economic Analysis to Transportation Problems, National Research Council, 1970-73
Committee on Technological Forecasting on Behalf of the Environment, Office of Science and Technology, 1970-71
Board of Economic Advisers, Public Interest Economics Foundation, 1974-84
Executive Committee, Caltech Environmental Quality Laboratory, 1970-71
Faculty Board, Caltech, 1974-76
Advisory Commission on Regulatory Reform, Senate Committee on Government Operations, 1975-77
Chair, Fourth Annual Telecommunications Policy Research Conference, 1975-76
Committee on Satellite Communications, National Academy of Sciences, 1975-76
Advisory Council, Jet Propulsion Laboratory, 1976-82

Boards and Committees, cont'd

Chair, Committee to Monitor the Desegregation Plan of the Los Angeles Unified School District, Los Angeles Superior Court, 1978-79

Advisory Council, National Aeronautics and Space Administration, 1978-81

Advisory Council, National Science Foundation, 1978-89

Board of Advisers, National Institute of Economics and Law, 1978-84

Research Advisory Board, Committee for Economic Development, 1979-82

President's Commission for a National Agenda for the Eighties, 1980

Board of Directors, Economists, Inc., 1981-

Review Panel, NSF Regulation and Public Policy Program, 1981-84

Board of Editors, Journal of Economic Literature, 1981-90

Advisory Board, Solar Energy Research Institute, 1982-91

Board of Directors, Cornell Pelcovits and Brenner, Inc., 1982-1988

Chair, Advisory Panel on Information Technology R&D, Office of Technology Assessment, 1983-84

Supervisory Board of Editors, Information Economics and Policy, 1982-88

Advisory Committee on Integrated Environmental Management Program, Environmental Protection Agency, 1983-85

Commission on Behavioral and Social Sciences and Education, National Research Council, 1984-90

Advisory Panel, NSF Policy Research and Analysis Division, 1984

Director, Program on Regulatory Policy, Stanford Institute for Economic Policy Research, 1984-

Panel on Clean Air, Science Advisory Board, Environmental Protection Agency, 1985-86

Board of Editors, Review of Economics and Statistics, 1985-2002

Contributing Editor, Regulation, 1986-93

Energy Research Advisory Board, Department of Energy, 1986-89

President & Chairman of the Board, Telecommunications Policy Research Foundation, 1986-87

Coordinating Editor, Information Economics and Policy, 1988-92

Board of Directors, International Telecommunications Society, 1988-92

Advisory Board of Editors, Journal of Risk and Uncertainty, 1988-2011

Acid Rain Advisory Committee, Environmental Protection Agency, 1990-91

Secretary of Energy Advisory Board, 1990-95

International Board of Editors, International Journal of the Economics of Business, 1993-

Faculty Senate, Stanford University, 1993-95, 98-02, 04-06

California Council on Science and Technology, 1995-2001

Panel on Universities, President's Committee of Advisors on Science and Technology, 1996

Committee on Intellectual Property and the Information Infrastructure, National Research Council, 1997-9

Board of Editors, Journal of Sports Economics, 1999-

Board of Associate Editors, Economics of Governance, 1999-

Board of Advisors, American Antitrust Institute, 2000-

Board on Science, Technology and Economic Policy, National Research Council, 2000-2006

Committee on Universal Postal Service, National Research Council, 2008

SPONSORED RESEARCH

"Opinions of Policemen." International Association of Chiefs of Police, 1969

"Studies in the Regulation of Economic Activity." Brookings Institution and Ford Foundation, 1970- 3

"Government Policies and Technological Innovation." National Science Foundation National R&D Assessment Program, 1973-4

"The Social Consequences of Earthquake Prediction," National Aeronautics and Space Administration, 1974-6

"Nuclear Safety Regulation." National Science Foundation RANN Program, 1975-7

"The Public Television Station Program Cooperative." National Science Foundation RANN Program, 1975-7

"The Station Allocation Game." Federal Communications Commission, 1977

"Energy Policy Studies." Various donors, 1978-84

Sponsored Research, cont'd

"Economics of Oil Leasing" and "Issues in Utility Pricing." Department of Energy, 1978-9
"The Economics of Boxing, Wrestling and Karate." California Athletic Commission, 1978
"Implementing Tradable Emissions Permits." California Air Resources Board, 1979-82
"Social Science and Regulatory Policy." National Science Foundation, 1980-2
"The Political Economy of Public Policy." National Science Foundation and Center for Economic Policy Research, Stanford University, 1983-4
"SIEPR Program on Regulatory Policy." various donors, 1987-
"The Economics of Research Universities and Scholarly Communication." Brown Center for Education Policy, Brookings Institution, 1995-6
"Coordination of Regulatory Reform," Organization for Economic Cooperation and Development, 1996
"The Future of the Research University," Carnegie Foundation, 1996
"SCID Program in Economic Policy Reform," Various donors, 2002-06

CONSULTING

Special Assistant to the President, Ford Foundation, 1969
Space Technology Applications, Jet Propulsion Laboratory, 1969
Panel on the Abatement of Particulate Emissions, National Research Council, 1971
Sloan Commission on Cable Communications, 1971
President's Commission on Government Procurement, 1971
Senate Subcommittee on Antitrust and Monopoly, 1971-72
MCI, Inc., 1972-73, 1983, 1986
National Science Foundation, 1973, 1975
Department of Justice, Antitrust Division, 1974-77, 1979-81, 1993-97
Internal Revenue Service, 1976-77
RAND Corporation, 1974-82
Los Angeles Lakers, 1974-75
National Football League Players Association, 1974-76, 1987-93, 2008, 2010-13
Office of Telecommunications Policy, 1975-77
National Basketball Association Players Association, 1975-76, 1987-88, 1994
Naval Ordnance Test Station, 1975
Commission on Law and the Economy, American Bar Association, 1977-78
Aspen Institute Program on Communications and Society, 1977
National Commission on Electronic Funds Transfer, 1977
Business Round Table, 1978
Federal Communications Commission, 1977-81
Food and Drug Administration, 1978
Carnegie Commission on the Future of Public Broadcasting, 1978
Department of Energy, 1979
Office of Technology Assessment, 1980
Kerr-McGee Corporation, 1980
CBS, Inc. 1982-83
Environmental Protection Agency, 1982-83
Showtime/The Movie Channel, 1983, 1985
Harlequin Books, 1984
Lake Huron Broadcasting, 1984
National Collegiate Athletics Association, 1984
National Medical Enterprises, 1985, 1987-88
Camellia City Telecasters, 1985-86
Brown and Root, Inc., 1985-86
McDermott, Inc., 1985-86
Major League Baseball Players Association, 1985, 1994
United Cable Television and American Television and Communications, 1985

Consulting, cont'd

United States Football League, 1985-86
City of Anaheim, 1986
Technicolor, 1986
Metro-Mobile, 1986-89
Hewlett-Packard, 1986-90, 1991
Echostar, 1987, 1994-95, 2002-03, 2004-05
Continental Airlines, 1987-88
Home Box Office, 1988-89
Bell South Cellular, 1989
Western Union, 1989
Minnesota Twins, 1989
Northwest Airlines, 1989
Pepsico, 1989
Yellow Phone, 1989-91
Dialog, 1990-91
California Public Utilities Commission, 1989-90
American Newspaper Publishers Association, 1990
Humana, 1990-91
Class Plaintiffs, Inside Wire Antitrust Litigation, 1990-93
South Coast Air Quality Management District, 1990-91
Federal Trade Commission, 1990-91, 2010-15
Delta Airlines, 1991
California Cable Television Association, 1991
Bureau of Competition Policy, Government of Canada, 1991
R&D Business Systems, *et al.* 1991-95
International Entertainment Group, 1992-93
Nike, Inc., 1992
World Bank, 1992-2006
Gemini, Inc. 1992-94
Servicetrends, Inc., 1993-94
William Sullivan, 1993-95
Sure Safe Industries, 1993
U. S. Department of Justice, Civil Division 1994-95
Kopies, Inc., *et al.* 1995-99
Telecom Technical Services, *et al.*, 1995-99
Digital Distribution, Inc.. 1996-99
Silvey, *et al.*, 1996-2000
Aguillar, *et al.* 1996-2000
Wadley Medical Center, 1997-2001
Oakland Raiders, 1997-2000
Major League Soccer Players Association, 1997-2000
Class Plaintiffs, Brand Name Prescription Drugs Litigation, 1998-99
Class Plaintiffs, Compact Disc Litigation, 1999-2003
Class Plaintiffs, State Microsoft Antitrust Litigation (California, Iowa, Minnesota, New York), 2000-07
Kingray, 2000
Napster, 2000-02
Metropolitan Intercollegiate Basketball Association, 2002-05
Congressional Budget Office, 2002
Pioneer and Scientific Atlanta, 2002-03
Lenschrafters, 2003-4, 2009-12
Seven Network, 2003-07
Sports Car Clubs of America, 2003-05
Intertainer, 2003-05
Class Plaintiffs, DRAM Antitrust Litigation 2005-07

Consulting, cont'd

Class Plaintiffs, Honeywell Antitrust Litigation, 2005-13
Class Plaintiffs, Tableware Antitrust Litigation, 2005-07
Class Plaintiffs, *White, et al., v. NCAA*, 2006-08
Class Plaintiffs, Apple iPod Antitrust Litigation, 2006-15
Sirius Satellite Radio and XM Satellite Radio, 2006-7, 2011-12
Class Plaintiffs, Cartier Antitrust Litigation, 2006-07
Monte Carlo Country Club and Société Monégasque pour l'Exploitation du Tournoi de Tennis, 2007
Pearle Vision, Inc., 2007-08
Class Plaintiffs, Apple iTunes/iPod Antitrust Litigation, 2007-15
Class Plaintiffs, SRAM Antitrust Litigation, 2007-09
Fair Isaac, 2007-09
Houston Baptist University, 2008
U. S. Department of Justice, U. S. Attorney's Office, San Francisco, 2008-09
Novell, 2008-11
GlaxoSmithKline, 2008-
Class Plaintiffs, Flash Memory Antitrust Litigation, 2008-10
Class Plaintiffs, *Khalid Eido, et al., v Infineon, et al.*, 2008-14
MobiTV, 2009-10
AT&T, 2009-10
Verizon, 2009-10
Ericsson, 2009-10
Kaleidescape, 2011-12
Class Plaintiffs, Text Messaging Antitrust Litigation, 2011-15
Class Plaintiffs, California Automobile Insurance Antitrust Litigation, 2011-14
Class Plaintiffs, NCAA Student-Athlete Name and Likeness Licensing Litigation, 2011-14
State Attorneys General and Class Plaintiffs, E-Books Antitrust Litigation, 2013-14
Pandora Media, 2013-14
Class Plaintiffs, Television Blackout Antitrust Litigation, 2013-16
Class Plaintiffs, Digital Music Antitrust Litigation, 2013-
City of San Jose, 2014-15
Class Plaintiffs, Lithium-Ion Batteries Antitrust Litigation, 2014-
Class Plaintiffs, National Collegiate Athletic Association Athletic Grants-in-Aid Antitrust Litigation, 2015-

BOOKS AND MONOGRAPHS

Reforming Regulation: An Evaluation of the Ash Council Report. Brookings Institution, 1971.

Economic Aspects of Television Regulation, co-authors Merton J. Peck and John J. McGowan. Brookings Institution, 1973. Winner, National Association of Educational Broadcasters Annual Book Award, 1974.

Government and the Sports Business, editor. Brookings Institution, 1974.

The Political Economy of Deregulation, co-author Bruce Owen. American Enterprise Institute, 1983.

Regulatory Policy and the Social Sciences, editor. University of California Press, 1985.

The Technology Pork Barrel, co-author Linda R. Cohen. Brookings Institution, 1991.

The Economics and Politics of Deregulation. European University Institute, 1991.

Constitutional Reform in California: Making State Government More Effective and Responsive, co-editor Bruce E. Cain. University of California Institute of Governmental Studies, 1995.

Books, cont'd

Sports, Jobs, and Taxes, co-editor Andrew Zimbalist. Brookings Institution, 1997.

Challenges to Research Universities, editor. Brookings Institution, 1998

A Communications Cornucopia, co-editor Monroe E. Price. Brookings Institution, 1998.

The Economics and Politics of the Slowdown in Regulatory Reform. AEI Press, 1999.

The Digital Dilemma, 17 co-authors (Committee on Intellectual Property Rights and the Emerging Information Infrastructure). National Academy Press, 2000.

Bridging the Digital Divide, editor. California Council on Science and Technology, 2001.

Economic Reform in India, co-editors Nicholas C. Hope, Anjini Kochar, and T.N. Srinivasan. Cambridge University Press, 2013

ARTICLES IN SCHOLARLY PUBLICATIONS

"Urban Concentration: Prospects and Implications." In *Increasing Understanding of Public Problems and Policies*. Farm Foundation, 1969.

"Metropolitan Employment and Population Distribution and the Conditions of the Urban Poor." In *Financing the Metropolis: Public Policy in Urban Economics: The Urban Affairs Annual Reviews*, IV, John P. Crecine, ed. Sage Publications, 1970. Brookings Reprint No. 184.

"National Communications Policy: Discussion — Spectrum Allocation Without Markets." *American Economic Review Papers and Proceedings* 60(2) (May 1970).

"The Behavior of Regulatory Agencies." *Review of Social Economics* 24(1) (March 1971): 15-19. Brookings Reprint No. 219 (November 1971).

"Summary and Conclusions," co-author William Capron. In *Technological Change in Regulated Industries*, William Capron, ed. Brookings Institution, 1971.

"The Nature and Causes of Regulatory Failure." *Administrative Law Review* 23(4) (June 1971): 424-437. Revised version published as "The Economics and Politics of Regulation." *Virginia Law Review* 57(6) (September 1971): 1016-1032.

"Mass Balance, General Equilibrium and Environmental Externalities," co-author, John Trijonis. *American Economic Review* 61(4) (September 1971): 730-735.

"Selling Research to Regulatory Agencies." In *The Role of Analysis in Regulatory Decisionmaking: The Case of Cable Television*, Rolla Edward Park, ed. Heath-Lexington, 1973.

"Relative Prices on Regulated Transactions of the Natural Gas Pipelines," co-author Paul W. MacAvoy. *Bell Journal of Economics and Management Science* 4(1) (Spring 1973): 212-234.

"Regulating Prices in Competitive Markets," co-author Lewis A. Rivlin. *Yale Law Journal* 82(7) (June 1973): 1426-1434.

"Attendance and Price Setting." In *Government and the Sports Business*, Roger G. Noll, ed. Brookings Institution, 1974. Reprinted in *The Economics of Sport*, Andrew Zimbalist, ed. Edward Elgar, 2001.

"The U.S. Team Sports Industry." In *Government and the Sports Business*, Roger G. Noll, editor. Brookings Institution, 1974. Abridged version reprinted in *Public Policies Toward Business: Reading and Cases*, William G. Shephard, ed. Irwin, 1975.

"Alternatives in Sports Policy." In *Government and the Sports Business*, Roger G. Noll, ed. Brookings Institution, 1974. Abridged version in *Public Policies Toward Business: Readings and Cases*, William G. Shephard, ed. Irwin 1975. Revised version in *Handbook of Social Science of Sport*, Gunther R. R. Luschen and George H. Sage, eds. Stripes Publishing Co., 1980.

"The Social Costs of Government Intervention." In *The Business-Government Relationship in American Society: Reassessment*, Neil H. Jacoby, editor. University of California Press, 1975.

"The Consequence of Public Utility Regulation of Hospitals." In *Controls on Health Care*. Washington, D.C.: National Academy of Sciences, 1975.

"Information, Decision-Making Procedures and Energy Policy." *American Behavioral Scientist*, Vol. 19, No. 3 (January/February 1976): 267-278. Reprinted in *Current Issues in Social Policy*, W. B. Littrell and G. Sjoberg, eds. Sage, 1976.

"Breaking Out of the Regulatory Dilemma: Alternatives to the Sterile Choice." *Indiana Law Journal* 51(3) (Spring 1976): 686-699. Reprinted in *Corporate Practice Commentator* 19(1) (Spring 1977): 99-114.

"Safety Regulation," co-authors Nina Cornell and Barry Weingast. In *Setting National Priorities: The Next Ten Years*, Henry Owen and Charles L. Schultze, eds. Brookings Institution, 1976.

"Major League Team Sports." In *The Structure of American Industry*, Walter Adams, ed. 5th ed. Macmillan, 1977. 6th ed. Macmillan, 1981.

"An Experimental Market for Public Goods: The PBS Program Cooperative," co-author John A. Ferejohn. *American Economic Review Papers and Proceedings* 66(2) (May 1976): 267-273.

"Government Policy and Technological Innovation: Where Do We Stand and Where Do We Go?" In *Innovation, Economic Change and Technology Policies*, K.A. Stroetmann, ed. Birkhauser-Verlag, 1977.

"Economic Policy Research on Cable Television: Assessing the Costs and Benefits of Cable Deregulation," co-authors S. M. Besen, B. M. Mitchell, B. M. Owen, R. E. Park, and J. N. Rosse. In *Deregulation of Cable Television*, Paul W. MacAvoy, ed. American Enterprise Institute, 1977.

"The Economic Implications of Regulation by Expertise: The Case of Recombinant DNA Research," co-author Paul A. Thomas. In *Research with Recombinant DNA*. National Academy of Sciences, 1977.

"The Dilemma of Consumer Advocacy." In *Regulatory Reform*, W.S. Moore, ed. American Enterprise Institute, 1978.

"Voters, Bureaucrats and Legislators: A Rational Choice Perspective on the Growth of Bureaucracy," co-author Morris P. Fiorina. *Journal of Public Economics* 9(3) (May 1978): 239-254.

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Exhibit 168(b)
Expert Testimony in Prior Litigation

I have testified in court or at a hearing before a magistrate in the following cases that are still ongoing or that were terminated within the past five years.

Bernard Parish, et al., vs. National Football League Players Association (U. S. District Court, San Francisco);

In re: Application of MobiTV Related to U.S. vs. ASCAP (U.S. District Court, New York City);

Reggie White, et al., v. NFL: Lockout Insurance & Lockout Loans (U.S. District Court, Minneapolis);

SmithKlein Beecham d/b/a GlaxoSmithKline vs. Abbott Laboratories (U.S. District Court, Oakland);

Novell vs. Microsoft (U. S. District Court, Salt Lake City);

DVD CCA vs. Kaleidescape (Superior Court, San Jose);

In the Matter of Adjustment of Rates and Terms for Pre-existing Subscription and Satellite Digital Audio Radio Service (Copyright Royalty Board, Washington, D. C.);

In re: Application of Pandora Media, Inc., Related to U.S. vs. ASCAP (U.S. District Court, New York City);

In re: NCAA Student Athlete Name and Likeness Licensing Litigation (U.S. District Court, Oakland);

In the Matter of Impax Laboratories, Inc. (U.S. Federal Trade Commission);

Apple iPod iTunes Anti-Trust Litigation (U. S. District Court, San Jose); and

Thomas Laumann, et al., vs. National Hockey League, et al., and Marc Lerner, et al., vs.

Office of the Commissioner of Baseball, et al. (U.S. District Court, New York City).

In addition, I have submitted declarations and/or been deposed in the following cases that are still in process or that were terminated during the past five years.

In Re Lithium-Ion Batteries Antitrust Litigation (U.S. District Court, Oakland, California);

National Association of Optometrists and Opticians, et al., vs. Lockyer, et al., (U.S. District Court, Sacramento);

In Re Dynamic Random Access Memory (DRAM) Antitrust Litigation (U. S. District Court, San Francisco);

Joel I. Roos and Tom Santos, et al., vs. Honeywell International (Superior Court, San Francisco);

Eric Seiken vs. Pearle Vision (Superior Court for San Diego County, San Diego);

Jason White, et al., vs. National Collegiate Athletic Association (U. S. District Court, Los Angeles);

In Re Static Random Access Memory (SRAM) Antitrust Litigation (U. S. District Court, San Francisco);

Fair Isaac, et al., vs. Equifax, et al. (U. S. District Court, Minneapolis);

Minority Television Project vs. Federal Communications Commission (U. S. District Court, San Francisco);

In Re Flash Memory Antitrust Litigation (U. S. District Court, Oakland);

In re Applications of AT&T Mobility, Ericsson and Verizon Wireless, Related to U.S. vs. ASCAP (U.S. District Court, New York City);

Sarah Perez, et al., vs State Farm Mutual Automobile Insurance Co., et al. (U.S. District Court, San Jose; and

Federal Trade Commission vs. Cephalon (U.S. District Court, Philadelphia);

In re Text Messaging Antitrust Litigation (U.S. District Court, Chicago);

In re NCAA Student Athlete Name and Likeness Licensing Litigation (U.S. District Court, Oakland);

In re Digital Music Antitrust Litigation (U.S. District Court, New York City);

City of San Jose, et al., vs. Office of the Commissioner of Baseball, et al. (U.S. District Court, San Jose); and

In re Electronic Books Antitrust Litigation. (U.S. District Court, New York City).

I am co-author of the following amicus submissions on matters that are still pending or were terminated during the past five years.

PSEG Fossil, et al., vs. Riverkeeper Inc. (U.S. Supreme Court);

American Needle vs. National Football League (U.S. Supreme Court);

Petition to Reconsider Sports Blackout Rules (U.S. Federal Communications Commission);

Motorola Mobility vs. AU Optronics (U.S. Court of Appeals for the 7th Circuit and U.S.

Supreme Court);

Puerto Rico Telephone Company v. San Juan Cable. (U.S. Supreme Court);

States of Ohio, et al., v. American Express Company, et al. (U.S. Supreme Court);

Tyson Foods v. Peg Bouaphakeo, et al. (U.S. Supreme Court); and

Visa, et al., v. Sam Osborn, et al. (U.S. Supreme Court).

Exhibit 168(c): FBS Conference Revenues
(\$)

Conference	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Power Conference Total	999,211,041	1,084,140,875	1,305,233,523	1,638,313,138	1,568,810,818	2,086,022,784	2,297,037,942	---
ACC	158,243,517	167,194,019	223,551,484	232,449,299	302,306,749	403,126,767	373,368,024	---
Big 12	148,902,324	159,660,869	159,510,498	217,104,334	227,714,636	267,755,283	313,238,532	370,940,249
Big Ten	232,403,651	265,078,691	304,319,901	318,381,451	338,919,854	448,760,655	483,400,000	---
Pac-12	101,913,230	111,773,205	175,898,248	333,992,599	374,019,275	439,012,303	488,024,478	---
SEC	244,411,873	261,046,772	273,063,526	314,497,919	325,850,304	527,367,776	639,006,908	650,059,489
Big East (pre-split)	113,336,446	119,387,319	168,889,866	221,887,536	---	---	---	---
Non-Power FBS Total	78,749,435	81,622,263	98,506,100	112,384,651	180,281,200	191,568,077	235,917,991	---
AAC	---	---	---	---	93,759,442	70,751,815	79,297,490	---
CUSA	49,982,925	46,550,799	58,597,319	62,615,665	45,374,215	56,821,268	50,265,400	39,007,460
MAC	10,916,145	12,344,469	17,743,642	23,335,365	12,720,168	24,455,641	29,724,986	34,710,845
Mountain West	9,018,035	11,739,085	10,941,050	9,857,849	13,225,615	16,177,850	52,832,283	---
Sun Belt	8,832,330	10,987,910	11,224,089	16,575,772	15,201,760	23,361,503	23,797,832	30,956,079
FBS Total	1,077,960,476	1,165,763,138	1,403,739,623	1,750,697,789	1,749,092,018	2,277,590,861	2,532,955,933	---

Notes:

The Big East was an FBS Power conference until 2013-14, when it split into the AAC (FBS) and the Big East (non-FBS).

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**Exhibit 168(d): Median Generated Revenues
(\$ million)**

Category	2013-14	2014-15	2015-16
All FBS	44.5	48.0	52.8
Autonomy	81.7	85.7	94.9
Non-Autonomy	11.9	12.5	13.2
FCS	4.1	4.0	4.5
Other D1	2.7	2.9	2.8

Notes:

“FBS” means Football Bowl Subdivision

“Autonomy” means the Power Five” conferences.

“Non-Autonomy” means the five other FBS conferences.

“FCS” means Football Championship Subdivision.

“Other D1” means D1 schools that play basketball but do not play football.

Source: Daniel L. Fulks, Revenues and Expenses, NCAA Research, September 2017, p. 12.

**Exhibit 168(e): EADA MFB, MBB and WBB Revenues
(\$)**

Classification	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Power (MFB+MBB+WBB)	2,996,680,901	3,122,057,277	3,388,768,609	3,641,432,166	3,835,419,753	4,147,887,136	4,426,585,682	4,692,982,192
Group of 5 (MFB+MBB+WBB)	555,986,686	604,292,226	666,445,965	702,521,843	744,649,347	799,508,952	857,449,652	905,286,640
Non-FBS (MBB+WBB)	576,485,377	606,848,014	648,259,198	685,526,577	722,548,756	776,459,734	812,031,151	843,142,993
Ivy League (MFB+MBB+WBB)	29,901,139	31,260,330	32,727,876	35,308,535	35,653,221	39,040,252	41,442,524	42,998,528
Total	4,159,054,103	4,364,457,847	4,736,201,648	5,064,789,121	5,338,271,077	5,762,896,074	6,137,509,009	6,484,410,353

Notes:

[1] Power schools defined as all FBS schools in a Big Six conference as of 2009-10 or Power 5 conference as of 2016-17.

[2] Group of 5 schools defined as all non-Power schools in FBS as of 2009-10 or as of 2016-17.

[3] Service academies do not report to EADA.

[4] Includes revenues from schools which have entered or exited Division I between 2009-10 and 2016-17

Sources:

[1] Equity in Athletics Data Analysis (EADA) Survey Data (bit.ly/2kIRHbI)

[2] ESPN.com