A Rapid Reaction to O’Bannon: The Need for Analytics in Applying the Sherman Act to Overly Restrictive Joint Venture Schemes

Stephen F. Ross and Wayne S. DeSarbo

Abstract

This Article reviews the recent and highly publicized district court decision holding that NCAA rules, which bar student-athletes from any compensation for image rights, violated the Sherman Act, and that big-time athletic programs could lawfully agree among themselves to limit compensation to $5,000 annually in trust for each athlete upon leaving school. This Article briefly discusses why the decision correctly found the current rule to be illegal, but also details why, under settled antitrust law, the critical question of how much compensation would significantly harm consumer appeal for college football and basketball is a question better left to marketing science experts. This Article then explains why neither the flawed survey offered in evidence by the NCAA, nor the anecdotal testimony of NCAA officials, should have been credited. Rather, this Article proposes, as a superior alternative, the use of conjoint analysis, a well-recognized technique of marketing science analytics employed to answer the critical legal question that the antitrust doctrine asks in cases like this.

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Introduction

Two of the nation’s most important service industries, big time intercollegiate sports and higher education, have been recently shaken by a federal district judge’s decision that a number of NCAA rules designed to protect “amateurism” in big-time college sports violated federal antitrust laws.\(^1\) In *O’Bannon v. National Collegiate Athletic Association*,\(^2\) Judge Claudia Wilken specifically held that the NCAA rule barring student-athletes from receiving any compensation for their university’s licensing of the athletes images, likenesses, or names (image rights) to commercial organizations was an unreasonable trade restraint unlawful under Section One of the Sherman Act.\(^3\) However, she concluded that NCAA member schools could lawfully agree to cap compensation for such licensing at $5,000 annually and hold the money in trust until the athlete graduated or otherwise left school.\(^4\)

*O’Bannon* correctly applied settled antitrust analysis to conclude that the current NCAA rule was unreasonable. In so finding, Judge Wilken also was correct in rejecting the NCAA’s proffered consumer survey to justify the current rule.\(^5\) However, the conclusion that universities that sponsor big-time commercial football and basketball programs may lawfully agree among themselves to provide zero compensation above the full cost of attendance to student-athletes (with up to $5,000 per year held in trust for later distribution) simply does not follow from her decision. The critical factual issue in this case is a question of marketing: how much compensation can be provided to big-time college football and basketball players without jeopardizing fan appeal and demand for the product? Instead of adopting *sua sponte* her own answer to that question, Judge Wilken should have directed the parties to employ a well-established measurement methodology, conjoint analysis, which sophisticated businesses often utilize to determine the salience and value of the attributes of a product/service that are desirable to consumers, to predict the answer to the critical factual issue(s) in this case.\(^6\)

In this Article, we briefly review the *O’Bannon* decision and why it correctly found the current rule to be illegal. Second, we critique the trial judge’s decision to permit the parties to significantly limit compensation to players for image rights, and detail why, under settled antitrust law, the critical question is one of marketing, focusing on the likely consumer response

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\(^1\) The issues that are the focus of this Article and the litigation discussed herein relate to commercial aspects of intercollegiate sports. With a few exceptions, the only sports that operate on a commercial basis are football and men’s basketball. A university operating solely with commercial concerns would not operate other sports. The courts have held that where the NCAA or its member schools are adopting rules that do not have a commercial purpose, the antitrust laws do not apply. Smith v. Nat’l Collegiate Athletic Ass’n, 139 F.3d 180 (3d Cir. 1998), *vacated on other grounds*, 525 U.S. 459 (1999).


\(^4\) *O’Bannon*, 7 F. Supp. 3d at 962.

\(^5\) Id. at 963.

to increased player compensation. Third, we outline a particular marketing science measurement technique and use insights gained from that analysis to see how to this critical answer could be approximated.

1. A Quick Review of the O’Bannon Decision

In O’Bannon, the challenged NCAA rules prohibit student-athletes from receiving any compensation for their image rights.7 In its opinion, the District Court first held that these rules constitute a “contract, combination or conspiracy” among the NCAA member schools.8 Second, the District Court held that because some rules are essential for the NCAA to offer commercially successful products such as college football or basketball, any antitrust scrutiny would be under the Rule of Reason, the standard traditionally used by courts to evaluate the legality of agreements under the Sherman Act.9 Next, the Court set forth the standard antitrust analysis under the Rule of Reason, a three-step inquiry where: (1) the plaintiff must establish that the challenged restraint has an actual anticompetitive effect in a relevant economic market; (2) the defendant can argue that the restraint is reasonable because it furthers legitimate, procompetitive goals; and (3) the plaintiff can still prevail by demonstrating that the challenged scheme is overly restrictive, and that the defendant’s legitimate goals can be achieved by less restrictive means.10 These three initial rulings each reflect well-established legal precedents.11

Under the Rule of Reason analysis, the Court correctly held that the plaintiff had shown an actual anticompetitive effect in a relevant economic market. The court credited persuasive testimony by leading sports economist Roger G. Noll, who testified that those student-athletes seeking to play football after high school found no reasonable substitute for college football programs participating in the Football Bowl Subdivision (FBS), and those seeking to pursue a

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7 O’Bannon, 7 F. Supp. 3d at 963. NCAA regulations outlaw any “pay” for athletes because of their athletic ability. NAT’L COLLEGIATE ATHLETIC ASS’N, 2013-14 NCAA DIVISION I MANUAL, CONST. art. 12.1.2 (2013). The rules define “pay” as anything of value not authorized by NCAA regulations. Id. art. 12.02.7. In addition, the standard scholarship agreement that member schools all use provides that, with regard to image rights, “[y]ou authorize the NCAA (or a third party acting on behalf of the NCAA (e.g., host institution, conference, local organizing committee)) to use your name or picture to generally promote NCAA championships or other NCAA events, activities or programs.” NAT’L COLLEGIATE ATHLETIC ASS’N, FORM 08-3A ACADEMIC YEAR 2010–11: STUDENT-ATHLETE STATEMENT—DIVISION I (2008), available at http://www.liberty.edu/media/1912/compliance/newformsdec2010/currentflames/compliance/SA%20Statement %20Form.pdf.
8 Id.
9 Id.
10 Id.
11 Tanaka v. Univ. of S. Cal., 252 F.3d 1059, 1062 (9th Cir. 2001) (quoting Hairston v. Pac. 10 Conference, 101 F.3d 1315, 1318 (9th Cir. 1996)). See generally Nat’l Collegiate Athletic Ass’n v. Bd. of Regents of Univ. of Okla., 468 U.S. 85, 98 (1984). In addition to these specific precedents, the U.S. Supreme Court declared almost a century ago that the ultimate test is whether a restraint promotes or suppresses competition. Bd. of Trade v. United States, 246 U.S. 231, 238 (1918). So, in theory, a restraint could be demonstrably necessary to allow the defendant to achieve its legitimate, procompetitive goals, but still be unreasonable because the overall harm to the plaintiff outweighed any benefit to the defendant. In fact, there are no reported sports cases and no known non-sports cases where a court has ever so held in evaluating a challenge under Section One.
post-secondary basketball career found no reasonable substitute for Division I college basketball. Judge Wilken reasoned that, absent the NCAA rule, FBS and Division I colleges would compete to lure recruits by offering them greater opportunities to be compensated for their image rights.  

Second, the O'Bannon Court applied well-settled legal precedent in holding that the defendants could still prevail by showing that their restraint was reasonably necessary to achieve a legitimate, procompetitive purpose. The U.S. Supreme Court has indicated that such a purpose must result in lower prices, higher output, or output more responsive to consumer preference than would otherwise be the case absent the restraint.  

In applying this black letter law, the O'Bannon Court had previously, and correctly, reasoned that business justifications must concern improving output in relevant markets, not

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12 O'Bannon, 7 F. Supp. 3d at 966.  
13 Id. at 994, 997.  
14 Id. at 985 (citing Tanaka, 252 F.3d at 1063). 
15 Bd. of Regents, 468 U.S. at 107. Sports antitrust law permits sports leagues to restrain one market if those restraints benefit another market. Most expressly in Sullivan v. National Football League, 34 F.3d 1091, 1110 (1st Cir. 1994) (involving a league ban on corporate ownership of NFL clubs), the First Circuit held that juries must be instructed to consider benefits to the marketing of NFL football as justifying harms in the market for NFL club securities. Several sports labor cases imply that restrictions that could be shown to be demonstrably necessary to achieve a level of competitive balance that fans prefer would be lawful despite any adverse impact on players. See, e.g., Mackey v. Nat’l Football League, 543 F.2d 606, 621 (8th Cir. 1976) (considering the preservation of competitive balance among NFL clubs as a potentially valid justification under the rule of reason, but finding particular NFL rule challenged in litigation to be overly restrictive); McNeil v. Nat’l Football League, 790 F. Supp 871, 893(D. Minn. 1992) (specific jury findings to same effect). Sullivan’s holding on this point applies to sports the principle that the Supreme Court established in Continental T.V. Inc. v. GTE Sylvania, Inc., 433 U.S. 36, 57-58 (1977), holding that positive effects on competition among sellers of rival brands could potentially justify anticompetitive effects on competition among sellers of the same brand. But see Smith v. Pro Football, Inc., 593 F.2d 1173, 1183-89 (D.C. Cir. 1978) (suggesting that competitive balance or other positive effects in the production of NFL football cannot justify labor market restraints). 

A full discussion of this point is beyond the scope of this Article. There are a variety of good reasons, however, for focusing attention exclusively on the three-part test described in the text, thus permitting the NCAA to justify image rights restraints if they could show that the restraints were necessary in order to increase the output (tickets, TV ratings, etc.) for college sports. First, were the NCAA not permitted to restrain trade to promote output, the reduced output might well result in lower compensation. (To take an extreme example, if ratings precipitously dropped were star athletes to receive million-dollar contracts, revenues would also drop and these athletes might receive less in an unrestrained market.) Second, the “apples and oranges” balancing that would be required to determine whether a consumer-enhancing agreement unduly harmed others would be close to unworkable for judges and juries to apply. 

Perhaps reflecting unstated concerns about workability, there are two categorical instances where defendants engaged in a “buyer’s cartel” are not allowed to justify limiting competition for inputs (in this case, player services), because of benefits in the output market (in this case, big-time college sports). Firms are not allowed to artificially hold down the cost of inputs under the theory that a portion of the savings will be passed on to consumers in the form of lower prices. Nor are cartels allowed to artificially support more output than the market wants by allowing inefficient firms to stay in business, where the only justification for the agreement would be to force down player costs to allow colleges that could not afford to operate to do so. In the latter case, the more prosperous defendants are free to share some of their revenue if they want to allow others to remain in the competition.
achieving other worthy social goals. Thus, a pre-trial order explicitly held that restraining trade in compensating football and basketball players could not be justified by benefits to non-revenue sport participants or female athletes. When the court addressed the NCAA’s claim that the challenged rule was necessary to preserve amateurism, the Court correctly focused on whether the restraints were “necessary to maintain the popularity of FBS football and Division I basketball.”

In meeting its burden as part of the second-step of the Rule of Reason analysis, a defendant must “come forward with evidence of the restraint’s procompetitive effects.” This means more than some plausible theoretical connection between the challenged restriction and some legitimate goal. In this context, the critical question is whether a particular rule or restraint contributes in a significant way to the popularity of college sports. In this regard, the court correctly rejected the NCAA’s evidence: a highly flawed survey of 2,455 respondents concerning consumer attitudes toward college sports. The key conclusion of this flawed study was that those surveyed “generally opposed the idea of paying college football and basketball players.” While a properly designed public opinion survey of general social attitudes might

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17 O’Bannon, 7 F. Supp. 3d at 1000. The O’Bannon Court considered and rejected three other plausible procompetitive justifications. Id. at 999-1005. Like the justifications discussed in text, the court held that the challenged rules could be justified to the extent necessary to maintain a level of competitive balance that fans prefer. Id. at 1001. However, the court found no evidence that image rights restrictions achieved that goal. Id. at 1002. The court also accepted as legitimate the NCAA’s justification that rules were necessary to improve the “quality of educational services provided to student-athletes in the restrained college education market.” Id. at 1003. However, unless compensation was so large that student-athletes were cut off from the broader campus community, the court found that the restraints in this case—as opposed to tutoring, support services, and academic progress rules—did not serve that goal. Id. Finally, the court expressly considered the NCAA’s justification that limiting compensation for image rights affected the ability to generate greater output in relevant markets. Id. at 1004. However, the court found that the claim that “the current rules enable some schools to participate in Division I that otherwise could not afford to do so is unsupported by the record.” Id. The court noted that neither the NCAA, nor its conferences require high-revenue schools to subsidize teams at lower-revenue schools (the standard technique in American professional sports leagues). Id.

18 Tanaka v. Univ. of S. Cal., 252 F.3d 1059, 1063 (9th Cir. 2001) (citing Hairston v. Pac. 10 Conference, 101 F.3d 1315, 1319 (9th Cir. 1996)).

19 O’Bannon, 7 F. Supp. 3d at 976.

20 Id. at 975.
be quite relevant to the policy question of whether Congress should enact an exemption to give effect to public opposition to paying student-athletes, general social attitudes are completely irrelevant to the antitrust analysis properly outlined by the Court. Antitrust analysis requires the court to focus on metrics related to output. When writing about making output more responsive to consumer preference, the U.S. Supreme Court meant this in reference to the preferences revealed by consumers in the marketplace, not in their living room. In this regard, the O’Bannon Court correctly noted that the results of the survey, in which sixty-nine percent of those surveyed were opposed to paying student-athletes, was “not relevant to the specific issues raised here” because the key was “how consumers would actually behave if the NCAA’s restrictions on student-athlete compensation were lifted.”

The court found “most relevant” the survey questions addressing whether respondents would be more or less likely to watch, listen to, or attend college football and basketball games if student-athletes were paid. However, the questions were not relevant to the issues in this case, because these questions asked about consumer behavior if athletes were paid either $50,000 or $20,000 per year (a specific attribute). This simplistic approach presents a number of problems. One, the survey did not inquire about consumer attitudes about lesser sums, or with regard to image rights. Two, output there was multidimensional and involved revenue sources such as attendance of games, watching on television, listening on other media sources, purchase of merchandise, etc. The potential effects of paying college athletes needed to be isolated for each source, because one cannot assume that any changes in the “product of college football” or the “product of college basketball” affect all consumers equally. Three, the potential ramifications to the consumer of paying college athletes can also be multidimensional, concerning a multitude of attributes specific to these particular outputs. A single attribute may be involved in such a proposed program. For example, should high sums of money be considered for payment to athletes, if consumers might suffer some inconvenience and additional costs? Such factors should be jointly considered in such surveys. Here, many consumers are unable to accurately determine the relative importance that they place on product attributes when asked to do so in an outright manner. Furthermore, individual attributes are perceived differently in isolation as compared to when those same attributes are aggregated and examined in the actual combinations found in the relevant product(s) or service(s).

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22 In fact, the court implied that this particular survey had another irremediable flaw: An initial question about what respondents had heard regarding paying players focused many respondents’ attention on the payment of illegal, under-the-table payments to players, which is wholly irrelevant to the issues in the case. Id. at 976.
24 O’Bannon, 7 F. Supp. 3d at 975.
25 Id.
26 Id. at 976.
II. Critique of the O’Bannon Conclusion

In O’Bannon, Judge Wilken expressly articulated the second of the three-step Rule of Reason test as requiring that a defendant “come forward with evidence of the restraint’s procompetitive effects.” 29 Indeed, with regard to several of the NCAA’s defenses, Judge Wilken applied the second step analysis in reasoning that the Court need not “address the availability of less restrictive alternatives for achieving a purported procompetitive goal ‘when the defendant fails to meet its own obligation under the rule of reason burden-shifting procedure.’” 30 Thus, “the Court does not consider whether Plaintiffs’ proposed less restrictive alternatives would promote competitive balance or increase output because the NCAA failed to meet its burden with respect to these stated procompetitive justifications.” 31

In light of the court’s factual findings that the NCAA had introduced no evidence supporting its claim that restricting image rights compensation had a positive impact on output, the district judge should have ended the inquiry and enjoined further enforcement of the law. Instead, Judge Wilken chose to focus on anecdotal testimony that was not really challenged by the Plaintiffs that “preventing schools from paying FBS football and Division I basketball players large sums of money while they are enrolled in school may serve to increase consumer demand for its product” and that likewise, paying star players huge sums might inhibit efforts to integrate student-athletes into the campus academic community, thus harming the quality of the educational “product.” 32

It is difficult to square the Court’s very different treatment of the competitive balance and amateurism justifications. Both justifications are theoretically plausible: if players were able to take advantage of a completely unrestrained market for sale of their image rights, it is possible that this would exacerbate the already imbalanced competition for college football and basketball, thus reducing consumer appeal, just as huge image rights payments might harm consumer demand for the product. The problem is that in both contexts, the NCAA failed to produce any evidence that the challenged restrictions on image rights had any effect on their procompetitive goals. 33

29 O’Bannon, 7 F. Supp. 3d at 985.
30 Id. (quoting PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 1913b (3d ed. 2006)). Judge Wilken also cited Law v. NCAA, 134 F.3d 1010, 1024 n.16 (10th Cir. 1998) (“Because we hold that the NCAA did not establish evidence of sufficient procompetitive benefits, we need not address question of whether the plaintiffs were able to show that comparable procompetitive benefits could be achieved through viable, less anticompetitive means.”).
31 O’Bannon, 7 F. Supp. 3d at 1005.
32 Id. at 1004.
33 A remarkable argument about the appropriate burden shifting under the Rule of Reason has been made in an amicus brief filed by a number of noted antitrust scholars and a leading antitrust practitioner in support of the NCAA’s appeal in O’Bannon. Citing well-established precedent that business agreements need not be “the least restrictive alternative” but only that the challenged restriction must be “fairly necessary” to justify the challenged restriction, see Am. Motor Inns, Inc. v. Holiday Inns, Inc., 521 F.2d 1230, 1248–50 (3d Cir. 1975), these experts argue that once the NCAA showed that some restrictions on player compensation would yield procompetitive
Having puzzlingly credited the NCAA with meeting its burden of showing that the challenged image rights restraint promoted some procompetitive goal, Judge Wilken then invented a remedy of a $5,000 annual cash payment to be held in trust.\textsuperscript{34} Judge Wilken’s own antitrust analysis does not support that decision.

To illustrate, suppose that the \textit{O’Bannon} suit had never been brought. Suppose further that the newly autonomous NCAA division featuring the “Power Five”\textsuperscript{35} football conferences had adopted the following rule: all member schools agree that they will insist that football players grant the school all rights to their names, images, and likenesses, but in return, these players will be paid $5,000 per year, with the money to be held in trust until they graduate or otherwise leave school. Finally, suppose that this new rule had been the subject of an antitrust lawsuit by five-star Alabama Crimson Tide freshman Cam Robinson.

Assuming the defendants did not proffer new evidence that the NCAA had failed to offer in \textit{O’Bannon}, and that the district court in the hypothetical case of \textit{Robinson v. Southeastern Conference et al.}, described above, followed the legal analysis used in \textit{O’Bannon}, the trial judge would conclude that this rule is an unreasonable restraint of trade in violation of section one of the Sherman Act. The court would find that the rule is fairly characterized as a “contract” between the members of the Power Five conferences. Next, the court would apply the Rule of Reason, because some rules are essential in order for big-time college football to exist. The court would then apply the three-step Rule of Reason burden-shifting approach. First, the court would identify the quality of play, the likelihood of success in the NFL, exposure, money spent on coaching and facilities, along with other factors, and would almost certainly find that there are benefits, then the burden shifted to O’Bannon to prove that a specific alternative would achieve the identical benefits. Brief for Antitrust Scholars as \textit{Amici Curiae} in Support of Appellant, O’Bannon v. Nat’l Collegiate Athletic Ass’n, Nos. 14-16601, 14-17068 (9th Cir. 2014), at 10–12. This claim, if accepted, would radically diminish antitrust scrutiny of overly restrictive agreements among collaborations with market power. Such a burden is very difficult to meet, and to allow NCAA member schools to agree among themselves to limit image rights compensation to zero, because of anecdotal evidence that compensation in excess of $50,000 annually might harm output, gives a sports monopoly unwarranted unreviewable economic power. It is also inconsistent with other sports precedents. In the two litigated professional football labor cases, the NFL’s overly restrictive agreements were held unreasonable, despite each court’s recognition that some labor restraints would be procompetitive, without any proof of a specific alternative that would achieve all of the NFL’s legitimate goals. \textit{See e.g., Mackey v. Nat’l Football League}, 543 F.2d 606, 621 (8th Cir. 1976) (considering the preservation of competitive balance among NFL clubs as a potentially valid justification under the rule of reason, but finding particular NFL rule challenged in litigation to be overly restrictive); \textit{McNeil v. Nat’l Football League}, 790 F. Supp. 871, 893 (D. Minn. 1992) (specific jury findings to same effect). Likewise, in \textit{Chicago Professional Sports Ltd. v. National Basketball Ass’n}, 961 F.2d 667, 675 (7th Cir. 1992), Judge Easterbrook upheld an injunction against a challenged NBA restriction on television rights sales, finding that the league’s legitimate interests could be served by the less restrictive alternative of revenue sharing, without identifying the specific formula that the NBA could adopt that would accomplish all of its legitimate goals.

\textsuperscript{34} \textit{O’Bannon}, 7 F. Supp. 3d at 1008.

\textsuperscript{35} The “Power Five” are those conferences with the greatest football revenue: The Southeastern, Pacific 12, Big Ten, Atlantic Coast, and Big 12 conferences. \textit{See Brian Bennett, NCAA Board Votes to Allow Autonomy} (Aug. 8, 2014, 1:22 PM ET), http://espn.go.com/college-sports/story/_/id/11321551/ncaa-board-votes-allow-autonomy-five-power-conferences.
no reasonable substitutes for Power Five conference football. Second, the court would examine the justifications for this rule. As in O’Bannon, the court would not allow a justification based on the need to cross-subsidize non-revenue sports. Given the lack of general revenue sharing and the evidence in the record (including historic competitive imbalance in college football), the court would likely find that the restriction was not necessary to promote competitive balance. As in O’Bannon, the critical issue would be a marketing question: whether the restraint was necessary to increase output of college football. Absent new evidence, the court would find no evidence in the record that the restraint furthered that goal.

In a somewhat puzzling outcome, a United States District judge issued an order imposing a remedy that, if it had been voluntarily agreed to by many of the defendants, would constitute an antitrust violation. However, trial courts rely on the adversarial system, and the trust concept was one proposed by the Plaintiffs’ counsel. Perhaps, as a matter of trial strategy, this was a sensible proposal to offer the judge a chance to pick a “safe” alternative that clearly would not impair output. However, there is a more precise and effective way to determine with greater precision the amount of restricted compensation necessary to ensure that the popularity of big-time college sports among consumers remains undiminished.

II. Conjoint Analysis and its Utility in Antitrust Litigation

Conjoint analysis is a measurement methodology most appropriate to answer the legal question posed by O’Bannon: to what extent can limits on compensating players be justified by the need to maintain consumer demand for college football and basketball? This methodology has been utilized in a variety of different disciplines including marketing, political science, healthcare, economics, recreation, energy, transportation, food safety, organizational behavior, law, engineering, etc. Conjoint analysis is a set of market research techniques that measures the value or utility a specific market places on each feature or attribute of a designated brand of product/service and predicts the value of any combination of features. Conjoint analysis asks questions that force survey respondents—actual or potential consumers—to make trade-offs among features, determines the value placed on each feature based on the trade-offs made by respondents, and permits simulations as to how the market will react to the various feature trade-offs being considered.

Conjoint analysis assumes that the consumer demand for a particular good or service is a function of the utility of the product’s underlying features or attributes. Typically, the list of relevant attributes is determined a priori through in-depth personal interviews, focus groups, or past surveys. As an illustration, the important attributes of demand for attendance of college sports among consumers remains undiminished.

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36 Since the Plaintiffs won, it requires temerity to second-guess winning trial lawyers.
38 Id. at 163.
football games would likely include the brand or conference (i.e., loyalty to a particular university because of geographic proximity or attendance by the fan or a family member), ticket price, time of game, location, quality of the game (on-field strength of home and visiting teams), weather, in-stadium amenities (for live attendance), whether the participating athletes are full-time students, and whether the participating athletes are receiving compensation for their services, etc.  

Although the attributes tested in conjoint analysis must be features one can categorize, the attributes do not necessarily have to be numeric. Conjoint analysis provides insights into the value of various brands as well as insights into the value of product features, including price sensitivity.

Once marketing analysts have identified the principal attributes driving consumer demand, they can develop a marketing survey. There are many types of conjoint analyses, but one of the most popular forms today is choice-based conjoint analysis (CBC).  

CBC’s major advantage is that the task of choosing a designed product/service is similar to what buyers actually do in the marketplace. Choosing a preferred product/service from a group of products/services is a simple and natural task that every respondent can understand. In addition, the profiles formed are combinations of the levels of the designated attributes that may or may not describe actual scenarios. As an illustration, consider our college football illustration described earlier. Suppose one were interested in modeling the choice decisions and utility functions for fans of a particular university’s college football team in hopes of assessing the potential effects of paying the players. Assume that the relevant set of attributes tested (and their levels) were determined from prior focus groups to be: Opponent (Notre Dame, University of Southern California, Alabama, Conference Game), Ticket Price ($100, $150, $200), Weather (Clear, Rainy, Snowing), Parking Fee (Free, $10, $25), Athlete Payment (None, $5000, $10,000, $25,000), Venue (Home, Away), Media (On Radio, On Local TV, On National TV), Kickoff Time (Noon, 4PM, 8PM), Halftime Entertainment (None, Band, Celebrity Singer) and In Game Promotions (None, Ethnic Foods, Giveaway).  

In this effort, a CBC respondent might see the following choice set:

*Which of the following football game would you most likely attend? Select “None” if you would not attend any of these listed games.*

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40 Previous literature has studied all the variables other than the last two, and recognized that these variables significantly impact attendance and television ratings. See generally Tim D. DeScheriver & Paul E. Jensen, *Determinants of Spectator Attendance at NCAA Division II Football Contests*, 16 J. SPORTS MGMT. 311 (2002). Prior studies, however, simply show the degree to which changes in these variables affect attendance. See Alex Koenig, *What Factors Contribute to Attendance in College Football?*, HARV. SPORTS ANALYSIS COLLECTIVE (Jan. 17, 2011), https://harvardsportsanalysis.wordpress.com/2011/01/17/what-factors-contribute-to-attendance-in-college-football/.


42 Note that this illustration is purely hypothetical and not based on any actual consumer responses.
<table>
<thead>
<tr>
<th>Opponent = Notre Dame</th>
<th>Opponent = USC</th>
<th>Opponent = Alabama</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100</td>
<td>$150</td>
<td>$200</td>
</tr>
<tr>
<td>Rainy</td>
<td>Clear</td>
<td>Snowing</td>
</tr>
<tr>
<td>$25 Parking</td>
<td>Free Parking</td>
<td>$10 parking</td>
</tr>
<tr>
<td>Athletes Not Paid</td>
<td>Athletes Paid $5000</td>
<td>Athletes Paid $25000</td>
</tr>
<tr>
<td>Away Game</td>
<td>Home Game</td>
<td>Away Game</td>
</tr>
<tr>
<td>On National TV</td>
<td>On Radio</td>
<td>On Local TV</td>
</tr>
<tr>
<td>Noon Start</td>
<td>4 PM Start</td>
<td>8PM Start</td>
</tr>
<tr>
<td>Halftime Band Show</td>
<td>No Halftime Entertainment</td>
<td>Celebrity Singer</td>
</tr>
<tr>
<td>Ethnic Food Specials</td>
<td>Giveaway Merchandise</td>
<td>No Special Promotions</td>
</tr>
</tbody>
</table>

From responses to such questions derived from a user specified experimental design, conjoint analysis uncovers the underlying utility for each level of each attribute. Options for estimating main effects and selected interactions are possible (e.g., interactions between Paying the Athlete and Price) and such options can be built in the specific experimental design utilized. Multinomial Logit and Hierarchical Bayesian analyses are utilized to estimate such utility functions at the aggregate, market segment, and/or individual level. From such statistical analyses, the user obtains quantitative estimates as to the impact of each level of each attribute, as well as significance tests to indicate the significance of the estimate obtained.

44 RAO, supra note 37, at 117.
46 SAWTOOTH SOFTWARE, INC., SAWTOOTH SOFTWARE TECHNICAL PAPER SERIES: THE CBC SYSTEM FOR CHOICE-BASED CONJOINT ANALYSIS 22-23 (version 8, 2013).
For example, suppose the utility values for the levels of the Paying Athlete attribute were:

<table>
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<th>Paying Athlete</th>
<th>Effect</th>
<th>t-value</th>
</tr>
</thead>
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<tr>
<td>No Payment</td>
<td>1.113</td>
<td>13.361</td>
</tr>
<tr>
<td>$5000</td>
<td>-0.016</td>
<td>-0.732</td>
</tr>
<tr>
<td>$25,000</td>
<td>-0.367</td>
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</tbody>
</table>

This hypothetical illustrates how, given the levels tested (which is an important caveat), the Paying Athlete attribute levels display an interesting and informative structure. Here, the most preferred option is for no payments to athletes, which carries a positive increment to overall utility. All other options involving payments carry a negative effect on utility and choice probability. Note, there is more to be learned for this market. Evidently, paying the athlete $5000 does not significantly detract from preference or choice probability (i.e., output). However, the jump to $25,000 or $50,000 seriously affects preference and choice probabilities in a negative manner. Note, these values can be calculated for each attribute/level and individual as well as for the overall market and by derived or specified market segment. Each of the level values is called a part-worth because they represent the worth of any given part of the product (football game).

Once estimates of the part-worths for each level of each attribute are obtained, one can begin to understand what trade-offs fans make so a product (game) will be more desirable to the market. This predictive capability is where the real power of conjoint analysis is evident. For example, given a set of estimated part-worths, one might have the following choice scenario describing the three football games described earlier:

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47 Where the column for Effect designates the increase or decrease in the latent utility function produced by the corresponding level of this attribute, and the t-value designates how significant the estimate is (i.e., is it significantly different from no effect or zero).
Here, Total Utility is the calculated value of each of the three profiles according to the specific design of the particular profiles and the estimated model coefficients. One then derives the probability of selection or choice by taking the exponential of these total utility values, and then calculating the ratio of Exp(Total) to their sum. Thus, in a three-way contest between Games A, B, and C, about 60% of the market should choose Game A, 28% should choose Game B, and 12% should choose Game C. One can also factor in a “No Choice” Option (Not Attend Any of These Games) in these calculations as well. The overall value of a product is referred to as its total utility.
By associating each attribute level with a part-worth, the analyst can create any number of competitive scenarios by mixing and matching the levels and increasing or decreasing the number of products. The desired result of most conjoint analysis studies is the creation of a logical framework to build a mathematical model that allows a simulation of, for example, the share of the market that will prefer one product or another. In addition, one can isolate the direct effects of altering the levels of the Paying Athlete attribute within the profiles tested and obtain a quantitative estimate of the market effect.

These choice shares, totaling 100%, are called “shares of preference,” because they refer to the share of the market that prefers each game option, if everything else were equal. Choice shares are not market shares per se, as they don’t take into account a variety of other factors, such as sales and marketing efforts, distribution channels, brand loyalty, etc. Simulating shares of preference here is a powerful tool. One can run simulations to help determine a response to a competitor’s change in its product. Firms contemplating additional new products can also use this technique to predict whether that will be beneficial, and from which products in the existing market a new product will grab the most share.

As applied to the antitrust inquiry in O’Bannon, conjoint analysis allows the analyst to determine with some precision a number of important questions. First, conjoint analysis can determine, assuming the other attributes were unchanged, the level of compensation to athletes that would negatively affect demand. Second, to the extent that compensating athletes may lead to higher ticket prices demanded by major programs, conjoint analysis can determine how those changes will likewise affect demand. In addition, one can employ optimization techniques to obtain optimal levels of each attribute that would maximize share or profit.

Because this analytical marketing tool allows endless scenarios to be tested in a competitive landscape, share of preference allows for powerful “what if” analyses. Given the mandate from Board of Regents, focusing on comparing changes in price and output to what “they would otherwise be,” this tool is well suited for resolving difficult antitrust questions posed under the Rule of Reason.

One of the obstacles courts face when reviewing antitrust challenges to long-standing agreements among competitors is the difficulty of determining with any confidence what “would otherwise be”—in the words of a foreign competition law tribunal, what is the

48 Green & Rao, supra note 6, at 355–63.
“counterfactual.” Where a similar league behaves differently, the results can be easily compared. Conjoint analysis has provided powerful insights in business even when a product is so new it has no competition and will create its own market. In addition to market simulations and shares of preference, conjoint analysis also analyzes the likelihood that a “new product” will be purchased by consumers. Purchase likelihood (i.e., probability) is often appropriate for specific product design as well. In the O’Bannon litigation, for example, the analysis could estimate the impact on consumer demand of various re-configurations of college football, including modest payments to athletes, allowing athletes to market their own image rights, or permitting complete professionalization of the market. Purchase likelihood analysis uses the total utility of a product to determine a percentage indicating the relative likelihood that the product will be purchased, given various combinations of features and pricing.

III. CONCLUSION

The structured Rule of Reason analysis that courts use in analyzing agreements among competitors, where some agreement is necessary to develop and promote the product, properly allows defendants to justify rules or regulations with some anticompetitive impact by showing that they are reasonably necessary to maintain or promote the consumer appeal of their product. In most markets, consumer demand is based on the appeal of various attributes of the product. An effective way for courts to answer the antitrust question of whether a particular restraint advances or maintains consumer appeal is to use conjoin analysis, a widely used marketing technique that allows the analyst to determine with some precision how strongly consumers value particular attributes.

As applied to the recent antitrust suit by college football and basketball players, challenging the NCAA’s blanket prohibition on their compensation for the use of their image rights, the analysis would begin by recognizing that consumers place a very high value on college football and basketball. As the U.S. Supreme Court observed in the context of college football, it is a distinctive product that makes it far more popular than professional sports to which it might otherwise be compared, such as minor league baseball. If Justice Stevens were an expert in marketing rather than antitrust law, he might say that the quality of on-field play is

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51 See, e.g., Rugby Union Players’ Ass’n Inc. v Commerce Comm’n (No. 2), [1997] 3 NZLR 301 (HC) (assessing the challenged restraint against a counterfactual which is “the Commission’s pragmatic and commercial assessment of what is likely to occur in the absence of the proposed arrangement”).

52 See, e.g., Bd. of Regents, 468 U.S. at 115 (rejecting claim that college football television restraints were necessary to promote competitive balance in light of competitive balance maintained in college basketball without these restraints); Chi. Prof’l Sports Ltd. v. Nat’l Basketball Ass’n, 961 F.2d 667, 675 (7th Cir. 1992) (rejecting argument that challenged restraint necessary to avoid “free riding” by individual NBA clubs because of revenue sharing alternative used by Major League Baseball).


54 Bd. of Regents, 468 U.S. at 102.
one attribute of consumer demand (shared by the Big Ten and baseball’s minor Pacific Coast League for example), but the identification with the academic tradition in college sports is another attribute that has a significant effect on demand. The relevant antitrust issue then becomes whether the challenged compensation ban on image rights is reasonably necessary to maintain the high demand for college football and basketball.

Conjoint analysis is a widely used technique in marketing science that permits a reliable estimate on how changes in a product’s attributes will affect consumer demand. It would allow an expert witness to test, verify, and/or reject Justice Stevens’ casual observation that this differentiation is explained by the fact that athletes must attend class and must not be paid. Done correctly, it can provide highly persuasive evidence of the precise legal question the Sherman Act poses about whether an agreement that lessens competition can be justified by enhancing the product’s consumer appeal.