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ARTICLE

Examining the Financial Impact of Alcohol Sales on Football Game Days: A Case Study of a Major Football Program

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As college athletic departments continue to seek additional sources of revenue to remain competitive, alcohol sales on game day increasingly has been considered as a potentially lucrative and untapped revenue source. Despite the seemingly high profitability from alcohol sales, the increased availability of alcohol coupled with its consumption by a large number of individuals has negative social consequences, including assaults, arrests, and other behavioral risks, causing potential ethical and social responsibility dilemmas for athletic departments and universities. Utilizing self-disclosed financial data (via interviews and documents) from a major college football program, this case study examines the financial implications of selling alcohol to the general public on football game days. Through proforma financial analysis, two revenue models are created to show the incremental revenue potential of alcohol sales. Results show that for this institution the incremental financial impact from alcoholic beverage sales does not create sufficient benefit to pursue this avenue of funding. This conclusion, however, must be examined within the larger resources, contextual constraints, and expectations of particular institutions for both competitive advantage and social responsibility.

Collegiate athletic departments at all levels continue to face financial challenges. This is highlighted in schools where all "minor" sports are funded with revenues derived from the few "major" sports that generate a profit. In 2009, the National Collegiate Athletic Association (NCAA) reported only 14 overall profitable athletic programs among the 120 Division I Football Bowl Subdivision (FBS) schools. In addition, of the 52 schools of Division I FBS that finished in the red, the median loss was $2.7 million ("NCAA report: Economy cuts into sports," 2010). As schools face a deficit, many have the option to increase revenues, reduce expenses, or both. Given the importance and centrality of athletics to the university, it is often difficult when schools opt to eliminate expenses. For example, in 2009, when faced with budget constraints and financial pressure, Hofstra University and Western Washington University cut their tradition rich football programs ("Hofstra drops football after 69 seasons," 2009; Kelley, 2009). This elimination caused an uproar on campus and may ultimately damage the university's prestige and enrollment.

When facing diminishing budgets and ballooning costs, athletic programs must also consider additional sources of revenue. One of these sources is the sale of alcoholic beverages on game days, especially if those sales include patrons in general admission as these individuals comprise the majority of game attendees. Currently about twenty colleges nationwide serve alcohol to the general public and more universities are considering the option (Briggs, 2011). Although the impact of these sales remains largely unmeasured, they could comprise a significant source of revenue to help balance precarious athletic budgets.

Despite the potentially lucrative financial benefits derived from alcoholic beverage sales, it is highly possible that sales to the general public on game days could result in the illegal sale of alcohol to minors, as a large portion of college football game attendees are college students. Further, among both minors and adults, common sense dictates that unmoderated, excessive consumption of alcohol results in harm to oneself and others. Such social consequences range from nonviolent aberrations in behavior (e.g., abnormal sleep patterns, disrupting others via rowdiness) to violence (e.g., assault, abuse), and in the most extreme cases, death (Glassman, Werch, Jobli, & Bian, 2007; Wechsler, Lee, Kuo, Seibring, Nelson, & Lee, 2002). To minimize these social ills on a college campus, many collegiate football programs only sell alcohol in restricted areas while enforcing strict regulations to ensure responsible drinking (Briggs, 2011).

However, the National Football League (NFL) reaps massive profits from the advertising and sale of alcohol to the general public during games (Verros, 2006). In fact, the NFL generates approximately $600,000 in alcohol revenues per game, and these sales represent 50% or more of total concession sales (Verros, 2006). With figures such as these, it is easy to see why colleges would entertain the idea of alcoholic beverage sales as a source of potential revenue.

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From a theoretical perspective, the resource based view (RBV) of the firm argues that organizations attempt to strategically use their resources to gain a competitive advantage (Barney, 1991). Within college athletics sources of advantage can include coaches, recruiting practices, facilities, or "program histories and traditions" (Smart & Wolfe, 2000). As financial stakes in college athletics rise, there is increasing pressure to maintain a competitive advantage, or at least not become disadvantaged in pursuing success on the playing field (Kelly & Dixon, 2011). This pressure often strains decisions involving moral and social responsibility and has led to numerous well-documented unethical decisions and scandals such as providing "improper recruiting benefits," allowing unchecked player behavior, or cheating on academics (e.g., Weir, 2011).

Corporate social responsibility (CSR) and corporate moral responsibility (CMR) are based in the idea that organizations have a responsibility to act for the social and moral benefit of their constituents and community (e.g., Carroll, 1979; Margolis & Walsh, 2003; McWilliams & Siegel, 2000; Sethi & Steidlemeier, 1995; Wood, 1991). CSR is typically associated with organizations' providing external community benefits such as charitable giving, but it is also associated with avoiding harmful activities such as polluting the environment or inciting community violence (Carroll, 1979; Godfrey 2009).

While universities historically have been expected to operate in a socially responsible manner, increasingly these expectations have extended to sport organizations—professional, community, and university-based. In fact, an entire special issue of the *Journal of Sport Management* was devoted to the topic of CSR, suggesting that sport organizations deal with important issues of if, when, and how to be socially responsible and the consequences of social responsibility or nonresponsibility particularly when measured against other organizational outcomes such as profit or wins (see Bradish & Cronin, 2009 for overview). For example, Babiak and Wolfe (2009) found that external expectations and pressures were important drivers of social responsibility for professional sport teams. In addition, Walker and Kent (2009) found that consumers thought more positively of and were more likely to purchase from socially responsible sport franchises.

CSR as a general theoretical model has implications for alcohol sales to the general public during college football games. In fact, the current economic environment in athletic departments epitomizes the struggle for a balance between finding sources of competitive advantage and maintaining ethical and social responsibility. The potential financial benefits from the sale of alcoholic beverages may or may not outweigh the negative social and ethical issues that arise from alcohol consumption in a collegiate atmosphere. However, very little information exists, particularly at the college level, as to the actual financial promise of alcohol sales (cf. Briggs, 2011). After providing the background and literature review on social issues related to alcohol sales both in college and professional football, this paper evaluates the financial return from alcohol sales of a major football program housed in one of the largest Division I FBS schools (hereafter, "State University").[1]

Literature Review

The NCAA holds a nonbinding, governing position over collegiate sport. While it prohibits the sale and on-site advertising of alcoholic beverages during all preseason, regular season, and postseason intercollegiate events, the NCAA promotes the "legal and responsible use of alcohol by fans outside the stadium" and condones advertising of alcoholic beverages with less than six percent alcohol by volume (National Collegiate Athletic Association, 2005). Often integrating the NCAA's stance into its own policy, individual member schools ultimately hold the responsibility of enunciating and enforcing their position regarding the availability of alcohol during sporting events.

The Board of Regents of the State University System[2] prohibits the use of alcoholic beverages on property and buildings owned through the system (2004). Two loopholes exist, though, as alcohol is permitted if approved by the chancellor of the system or president of an individual institution within the system, and the ban does not apply to areas licensed under state law specifically for the sale and service of alcohol (State University, 2004). The latter thus enables the sale and consumption of alcohol on game days within the confines of the exterior club tents, the club seating area, and the suites in the upper levels of the university's prominent football stadium.

Alcohol at the Collegiate Level

A number of studies conducted in academia and through nonprofit organizations have chronicled the overconsumption and unregulated drinking habits of college students. The National Institute on Alcohol Abuse and Alcoholism stated that in general, "about four in five of all college students drink, including nearly 60% of students age 18 to 20" (n.d., para. 2). The American College Health Association National College Health Assessment (ACHA-NCHA) showed that "college students had a significantly higher prevalence of occasions of heavy drinking… 40% versus 35% among their age peers" (2010, pp. 230–231). Moreover, high-risk drinking, also known as binge drinking, remains a prevalent social activity particularly for college students despite the potential of negative consequences that are often associated with it (Douglas et al., 1997; Glassman et al., 2007; Wechsler, Lee, Kuo, & Lee, 2000; Wechsler et al., 2002). Wechsler et al. (2002) documented these specific consequences of alcohol use: getting into trouble with the police (6.5%), getting injured or hurt (12.8%), interruptions with study/sleep (60%), taking care of a drunk student (48%), humiliation or insult (29%), as well as academic and interpersonal problems. These problems can effectively deter a school from serving alcohol to students and/or the general public at any time, including game days.

Football game days often provide students a socially-acceptable excuse to begin drinking early in the morning and continue late into the day. Collegiate drinking is thus often associated with specific social or recreational events (e.g., the weekly football game), as consuming alcohol expresses group solidarity and increases group cohesion (Nelson & Wechsler, 2003; Rabow & Duncan-Schill, 1995). These days are often viewed as "party days," in which a more disinhibited social atmosphere is likely to lead to increased alcohol use as well as other behavioral risks" (Neal & Fromme, 2002, p. 2682). Studying context-specific drinking patterns, Neighbors, Oster-Aaland, Bergstrom, and Lewis (2006) showed that 76.72% of students who participated in tailgating reported consuming "an average of 3.82 standard drinks (*SD* = 2.75)" during the event (p. 285). These numbers come dangerously close to reflecting those of binge drinking, defined by the Centers for Disease Control and Prevention (CDC) as when men consume five or more drinks and when women consume four or more drinks in about two hours ("Alcohol and public health," 2010). Thus, unsurprisingly, a "large percentage of alcohol-related violations occur on college game days" (Neal & Fromme, 2002, p. 2682).

In addition to more extreme drinking styles, sport fans also exhibit aggressive and destructive behavior (Nelson & Wechsler, 2003; Rees & Schnepel, 2009). Under the influence of excessive amounts of alcohol, raucous spectators cause riots, stampedes, fights, and fatal beatings (Glassman et al., 2007). Incident data revealed that home games "are associated with a 9% increase in assaults . . . [and] an 18% increase in vandalism" (p. 74). Additionally, data showed that arrests for drunk driving increased 13%, those for disorderly conduct increased 41%, and those for liquor law violations increased 76% (Rees & Schnepel, 2009). Unregulated consumption of alcohol or high-risk drinking thus poses an ethical and legal burden upon not only the individual who consumes the alcohol but also other game attendees. Collegiate football games, where drinking is present, can therefore "impose a cost on the host community in the form of additional crime" (Rees & Schnepel, 2009, p. 74).

Drawing from research in academia and reacting to the overwhelming number of incidents reported to the police, University of Colorado at Boulder administrators wanted to send "a consistent message… where 'you don't necessarily have to drink to have fun'" when they banned alcoholic beverage sales to the general public on game days in 1996 (Director of Business Planning & Finance, personal communication, July 21, 2010). In the 1995 season alone, university police recorded 121 ejections, 20 arrests, and 9 assaults at the six home games held in Folsom Field" (Bormann & Stone, 2001, p. 82). When the stadium restricted alcohol access to only premium level seats, ejections decreased by 50%, arrests decreased by 45%, and assaults and student referrals to the judicial affairs office both fell by 89% (Bormann & Stone, 2001). These results from the alcohol ban at Folsom Field further support the relationship between negative behaviors and excessive alcohol consumption. Nonetheless, it is possible, with an understanding of the consequences, that schools can implement measures that mitigate these risks while reaping financial benefits from alcohol sales.

Alcohol at the Professional Level

The National Football League is an example of how schools could advertise, promote, and sell various alcoholic beverages despite the potential effects of excessive consumption of alcohol. The NFL and its teams earn millions from alcoholic beverage companies that run television commercials during games, purchase naming rights, and place print advertisements throughout the stadium. From 2002 to 2010, MillerCoors paid the NFL $100 million annually for its brand to be the "Official Beer Sponsor" of the NFL (Beirne, 2007; Dukcevich, 2002). In 2011, when Anheuser-Busch won the bid for naming rights, sources stated that Anheuser-Busch agreed to pay $1.2 billion for a six-year contract or $200,000,000 annually (Fredrix, 2010; Lefton, 2010). In addition to a beer sponsor for the league, individual teams have their own exclusive sponsor so that competitors can advertise at the local level. Although these figures are not publicly disclosed, this structure not only enables the league to profit, but individual teams also profit as each negotiates its own lucrative advertising and sponsorship contracts.

In addition to revenues from marketing contracts, concessions also provide a significant source of income. As eating is an integral factor in the game day experience, consumers spend approximately $9 billion annually on food and beverages at sporting events, of which hot dogs, nachos, soda, and beer comprise 80% of the revenue (King, 2004; Larson & Steinman, 2009). Additionally, approximately $2 billion of the total $9 billion spending comes from NFL suites and club seating areas where customers each spend an average $80–90 on food and beverage, including alcoholic beverages (Cameron, 2004). In general admission, the average fan spends approximately $15 at each NFL game on standard concessions (one beer, one soft drink, and one hot dog; Team Marketing Report, 2008). By capitalizing on one of the fundamental elements of the game day experience, the NFL successfully sells alcohol to fans despite the blatant markup in price. By excluding alcohol sales, colleges eliminate an opportunity to increase revenues in an area where the NFL visibly profits.

Despite the millions reaped by the NFL and its 32 teams through the sale and marketing of alcoholic beverages, the NFL does acknowledge the potential negative consequences that result from excessive alcohol consumption through its efforts to promote responsible drinking. Some of these efforts were spurred by an important court case involving actions during an NFL game. In 1999, Aramark, the concessionaire at Giants Stadium, was found guilty of serving alcohol to a visibly drunk fan (who later paralyzed a two-year old girl as a result of a car accident on the way home from the game) and of condoning an atmosphere where visibly intoxicated individuals could purchase alcohol (Associated Press, 2009). Aramark was fined $30 million in compensatory damages and $75 million in punitive damages, comprising the largest alcohol liability award ever in the United States (Associated Press, 2009). This verdict was overturned on appeal in favor of Aramark in 2009 but will be further appealed by the family to the state Supreme Court (Associated Press, 2009). Nonetheless, the tangible expenses of more than a decade of litigation as well as the intangible costs in the form of ongoing negative publicity epitomize the costs that Aramark has paid as a result of assuming the liabilities associated with selling alcohol at football games.

The various lawsuits brought against stadiums, concessionaires, and teams over fans who drive drunk and injure others have caused the industry to place a greater emphasis on alcohol management, though not alcohol bans (Muret, 2008). In 2009, the NFL introduced a Fan Code of Conduct in which violators (defined as visibly intoxicated patrons behaving irresponsibly) would be ejected with future ticket privileges revoked and recommended that teams restrict tailgating and alcohol purchases (Maske, 2008; "NFL teams implement fan code of conduct," n.d.). Individual stadiums have implemented additional measures such as stopping alcohol sales at the end of the third quarter, presenting valid identification with purchase of beer, prohibiting bringing alcohol into the stadium, and ejecting fans as a result of drunk and disorderly conduct (e.g., Arizona Cardinals, 2010; Indianapolis Colts, 2010; Seattle Seahawks, 2010). Emphasizing responsible alcohol service, vendors have increased training for employees who serve alcohol and implemented authenticity ID-checking systems (Muret, 2006; Verros, 2006). Through these methods, the various tiers of the industry reap the financial benefits while minimizing the ethical and legal issues that result from alcohol consumption on game days.

Despite the abundant literature exploring the ethical and social aspects of excessive alcohol consumption, current studies fail to explore the finances of alcoholic beverage sales. Because beer and football game are often synonymous, alcoholic beverage sales to the general public is the next logical revenue driver. Undoubtedly, negative consequences result from uncontrolled drinking, but with countermeasures such as those implemented by the NFL, could universities adopt and alter the professional profit-maximizing structure such that it is compatible with the collegiate game while maintaining a fan-friendly atmosphere?

Method

Research Setting

Boasting one of the most profitable football programs in the United States, the athletic program at State University neither receives funds from the school nor the state, but instead, gives money back to the university. From 2005 to 2009, the athletic department contributed an estimated $13 million to the university's general fund (Athletic Department CFO, personal communication, May 1, 2010). This sustained profitability is based on both quantitative (e.g., ticket sales) and qualitative (e.g., expectations, loyalty) factors.

As constructed from numbers extracted from income statement accounts as supplied by the Athletic Department CFO, Table 1 attests to the extreme profitability of the football program as it generated $65 million of net income in 2008. Within the context of all athletics, football drives 60% of total revenue while consuming only 20% of expenses (Athletic Department CFO, personal communication, May 1, 2010). Table 1 also reveals that the single greatest component of total revenues is ticket sales. The athletic department has structured these sales such that the majority of revenue is derived from the overall process of purchasing season tickets rather than from the seat itself. In contrast to many stadium pricing models, where the premium seats (e.g., lower level, 50 yard line, club seating) are priced higher than the nonpremium seats, at this university, all seats in the stadium are the same price. Access to the premium seats is based on the value of one's donation to the school's athletic foundation. Thus, seat locations are allocated via a point system based on annual and cumulative donation amounts to the athletic foundation. (The ticket price is a combination of the face value of the ticket plus the tax deductible donation. This is a two-step process, and both steps create revenue). So, for example a patron on the upper level end zone may pay $750 for one season ticket to the football games. Another patron on the lower level 50 yard line may pay $750 for a season ticket, plus an annual donation of $5,000 for the rights to that particular seating location. As such, loyalty and continual patronage are critical factors in incentivizing individuals to purchase season tickets year after year, which then contribute to the overall sustainability of the model.

Of the total seats in the football stadium, 80,000 seats are designated to season ticket holders. These are then further divided into 11,350 premium level seats, defined

Table 1 Comparative Income Statement for the Football Program

Income Statement Accounts	2008	2007
Revenue		
Ticket Sales	$31,792,838	$24,553,411
Concessions	$1,573,834	$1,108,970
Other Sources	$54,217,313	$47,290,016
Total Revenues	$87,583,985	$72,952,397
Total Expenses	$(22,569,086)	$(20,049,651)
Net Income	$65,014,899	$52,902,746

as either club seats or private seating with a hospitality room, and 68,650 general admission seats. Premium seating provide patrons with additional amenities, including televisions for national football coverage, extended food selections, cup holders and cushioned outdoor seats, but most importantly, adult beverage service (Assistant Athletics Director for Development, personal communication, April 7, 2010). This distinguishing feature is evident in the high donation amount and demand that drives the sale of premium seating. Currently, the legal drinking age in the state where this university is located is 21 years of age, and while undoubtedly alcohol is consumed by patrons of various unknown ages at tailgating parties surrounding the stadium, the university neither strictly monitors nor sells alcohol in unsanctioned tailgating areas. The only areas for alcohol purchase in and around the stadium are to those of legal drinking age accessing premium seating and club areas.

A newly-constructed club seating area epitomizes how alcohol availability (as an essential component of the total premium seating package) impacts the demand and sale of season tickets. In 2008, when these seats initially became available for sale, the only difference between this club area and other club areas was that it did not sell alcoholic beverages during the game. The impact of this exclusion was evident in ticket sales, as only half of the seats were sold in that year. To remedy the lack of sales and boost profits in the second year, a temporary hospitality area was added that introduced alcohol service. With the addition of the new hospitality area and alcohol availability, the seats filled to 90% capacity in the following year. In 2010, with a permanent hospitality area and a full bar, demand was so great that a waiting list was created for the same seats that were empty two years prior (Assistant Athletics Director for Development, personal communication, April 7, 2010).

Table 2 demonstrates the power of alcohol in driving ticket sales as it increases demand as well as the average donation amount. After the club area began selling alcoholic beverages, seats filled and the average donation for each seat increased. Over the two-year span, total donations increased 125%. Although alcohol availability invariably contributed to the incremental increase in the average donation amount, the extent of its impact cannot be distinguished from other factors that affect ticket demand and donations. Nonetheless, the influential factor that alcohol plays in ticket demand and donation amounts is unquestionable.

Procedures for Development of Financial Models

Two methods of data collection were used to create the two financial models that represent the potential increased revenue from alcohol sales on game days. One method was personal communication with Associate Athletic Director for Business Operations/Chief Financial Officer of the athletic department at State University, the General Manager of the concessionaire, and the Associate Athletic Director for Game Management and Operations. Second was an analysis of internal and publically available financial documents. Internal organizational documents were supplied by the CFO. Historical data in Table 1 are actual figures extracted from internal documents and publicized financial statements. However, some of the figures in the pro forma statements (Table 3, Table 4) are based on averages and estimates provided by the aforementioned experts, who each have over 20 years of experience in the industry and at this university. The use of averages and estimates has been noted where used.

Model One: Alcohol Availability Only in Premium Seating Areas. Table 3 reflects the current structure of concession revenue on football game days. It assumes (based on information from State University's concessionaire and athletic department CFO) that the general admission patron spends $5 per game ($3.25 for one food item and $1.75 for one beverage). Then, because the prices in premium seating are higher, the model assumes that each patron in this area chooses to buy either one alcoholic beverage ($8) or spend a flat-fee for a nonalcoholic beverage and food ($24). This yields total concession revenue of $524,850 per game or $3,149,100 annually for six home games.

As concessions on game days are outsourced to a concessionaire, the athletic department only earns a portion of total revenues that is based on contractually-stipulated percentages. This outsourcing represents the costs in the financial model. The concessionaire would not disclose the break-down of these costs into categories (e.g., cost of goods, labor, overhead) for this study, but in practical terms these are considered the operating costs for selling the various concessions products, such that each of the models reflect both gross and net revenue. The current contract states that the athletic department receives 48% of gross revenue on food and nonalcoholic beverages, 43% of net revenue (gross revenue less 14% state sales tax on alcoholic beverages), and 20% of gross revenue on catering. Because this paper focuses on revenues generated

Table 2 Estimated Financial Data of Donations in Club Seats

Year	Average Donation	Number of Occupied Seats	Number of Empty Seats	Percent Capacity	Total Donations
2008	$800	1,200	1,200	50.00%	$960,000
2009	$850	2,100	300	87.50%	$1,785,000
2010	$900	2,400	0	100.0%	$2,160,000

Table 3 Concession Revenue without Alcohol Sales in General Admissions

	Non-Alcoholic Beverage & Food	Non-Alcoholic Beverage & Food	Alcoholic Beverage	Catering	Total
General Admissions Concession Revenue (per game)	$343,250				
Premium Seating Concession Revenue (per game)		$136,200	$45,400		
Number of Home Games	6	6	6		
Total Concession Revenue (per season)	$2,059,500	$817,200	$272,400		
Net of State Sales Tax on Alcohol	1.00	1.00	0.86		
Concessionaire Revenue	$2,059,500	$817,200	$234,264	$461,422	
Contractual Percentages	48%	48%	43%	20%	
Athletic Department Revenue	$988,560	$392,256	$100,734	$92,284	$1,573,834

Note. All numbers are based upon estimates except the contractual gross profit percentage and the sum of all revenues attributed to the athletic department at State University.

Table 4 Concession Revenue with Alcohol Sales in General Admissions

	Food	Non-Alcoholic Beverage & Food	Alcoholic Beverage	Alcoholic Beverage	Catering	Total
General Admissions Concession Revenue (per game)	$120,138		$549,200			
Premium Seating Concession Revenue (per game)		$136,200		$45,400		
Number of Home Games	6	6	6	6		
Total Concession Revenue (per season)	$720,825	$817,200	$3,295,200	$272,400		
Net of State Sales Tax on Alcohol	1.00	1.00	0.86	0.86		
Concessionaire Revenue	$720,825	$817,200	$2,833,872	$234,264	$461,422	
Contractual Percentages	48%	48%	43%	43%	20%	
Athletic Department Revenue	$345,996	$392,256	$1,218,565	$100,734	$92,284	$2,149,835

Note. All numbers are based upon estimates except the contractual gross profit percentages.

by the general and premium seating areas, concession revenues generated via catering are held constant in the two models as these are derived from stadium suites.

In 2008, the athletic department earned $1,573,834 from concessions. As seen in Table 3, of revenues contractually obligated to the athletic department and overall total revenue, general admission seating generated the largest portion of revenue for both the concessionaire and the athletic department (about 63% of total revenues). Therefore, the area with greatest potential revenue growth via the introduction of alcohol beverages sales is general admissions as it represents the largest number of potential consumers of alcoholic beverages.

Model Two: Alcohol Availability Expanded to General Admission Seating Areas. The model presented in Table 4 alters the current concession scenario as construed by model one (Table 3) by adjusting revenues from patrons in general admission. This model maintains that the revenues from premium seating and catering will remain consistent and utilizes the same alcoholic beverage cap for general admission seats as is currently used in premium level seats. Contractual net profit percentages also remain constant. Although the more prevalent trend is that some individuals buy multiple alcoholic drinks while others do not buy any, the assumption of one alcoholic beverage per individual in general admission per game is used (Associate AD Game Management and Operations, personal communication, July 23, 2010). The model also considers the cannibalization of sales of other beverages through the elimination of revenues from nonalcoholic beverages. Individuals who buy alcoholic beverages are unlikely to also buy a bottle of water or a soda, further substantiating the use of $8 per cap.

As seen in Table 4, as alcohol availability expands, total concession revenue increases from $3.1 million to

$5.1 million per football season. However, due to the outsourcing of concessions, the athletic department receives only $2.1 million. The $576,001 increase in revenue from $1.6 million (Table 3) to $2.1 million (Table 4) per season is solely attributed to the availability of alcohol to patrons in general admission. This scenario additionally assumes that all seats are sold out every game and consistent consumption patterns based on the reasoning that the behavior of individuals in premium seating does not depend on the availability of alcohol in other parts of the stadium as revenues from premium seating are held constant.

Results

Integrating projected concession revenues from both models into Table 1, the pro forma income statement (Table 5) demonstrates the impact of changes in concession revenue on overall net income. By selling alcohol to general admission patrons, the athletic department receives an additional $576,001 in net revenue. General admission revenue increases by 58%, but in the larger scope of concession revenue, the increase is only 37%. Then, when placed in the context of the entirety of the football program budget, the impact on total net income is much less significant at 0.89%. As the other revenue drivers comprise a much greater portion of income, this insignificant impact not only reveals the minimalistic component of concessions in increasing revenue, but it also shows the immateriality of additional revenues reaped through the sale of alcoholic beverages to the general public. In the greater context, when accounting for all the various sources of revenue, the six-figure net gain is of nominal impact on the eight-figure income statement of the football program.

Discussion

The extraordinary profitability inherent in the football program is unquestionable. With an overall departmental net income (after costs of outsourcing to the concessionaire) that holds constant in the double-digit figures of millions, the additional $576,001 gained in net income via the sale of alcoholic beverages immaterially impacts the bottom-line. Furthermore, the removal of the exclusivity of alcoholic beverages from premium level seats will undoubtedly decrease total donations toward accessing these premium seats. With the general public consuming alcohol, patrons may no longer feel the need to pay an additional amount for club level seats. These individuals may react by either incrementally decreasing their donation to reflect the lack of exclusivity despite the other amenities or altogether forgo expensive club seats for less expensive general admission seats—both of which then hurt overall profits.

Premium seating affords other advantages in addition to the availability of alcoholic beverages, but alcohol plays an instrumental part in ensuring that premium level seats are sold out on a continual basis, year after year. Based on finances alone, without taking into consideration the negative ethical implications, these models show that alcohol should not be sold to the general public on game days. The current structure of ticket sales and segregation of alcohol sales areas already largely optimizes financial revenues.

As previously mentioned, the potential negative consequences of excessive alcohol consumption range from minor disruptions (sleep abnormalities, rowdy behavior) to major incidences (assault, hospitalization, death; Glassman et al., 2007; Wechsler et al., 2002). When the financial gain is evaluated in the context of these and other social implications of alcohol sales, the financial gain neither outweighs nor compensates for the social ills. The costs that are associated with a negative image from social irresponsibility, additional crime rates, and other social ills are difficult to quantify and *no* amount can accurately represent the impact of a life-altering event or the loss of a life. Moreover, the study at the University of Colorado at Boulder provides further support that decreasing alcohol availability reduced police incident reports (Bormann & Stone, 2001). Despite the desire for athletic programs to gain any strategic advantage possible, and to use thier resources effectively to gain an edge (cf. Barney, 1991; Kelly & Dixon, 2011), this study

Table 5 2008 Pro Forma Income Statement Comparing Alcohol and Non-Alcohol Sales

Income Statement Accounts	No Alcohol	Alcohol	Change	% Change
Revenue				
Ticket Sales	$31,792,838	$31,792,838	$0	0.00%
Concessions	$1,573,834	$2,149,835	$576,001	36.60%
Other Sources	$54,217,313	$54,217,313	$0	0.00%
Total Revenues	$87,583,985	$88,159,986	$576,001	0.66%
Total Expenses	$(22,569,086)	$(22,569,086)	$0	0.00%
Net Income	$65,014,899	$65,590,900	$576,001	0.89%

suggests that universities should proceed down this path with extreme caution.

From a CSR perspective, alcohol consumption in a collegiate atmosphere prompts the discussion of many ethical and social responsibility questions. Although some of the spectators who attend games include community members who are not students, the expansion of alcohol sales in a collegiate stadium where half the student body is underage only results in further unnecessary scrutiny that can harm a university's reputation. Thus, the potentially negative social implications further support the restriction of alcohol availability to premium seating areas. Not only do colleges face the possibility of catastrophic events such as deaths due to overintoxication or drunk driving, they also face problems with negative image associated with not acting in a socially responsible manner. Walker and Kent (2009) found that fans and patrons were quite sensitive to sport teams' social responsibility actions—surely harm that would come from alcohol related incidents would hurt athletic department and university community relations and fan support.

Although this paper fails to substantiate the introduction of alcohol at football games at this specific university, smaller schools may support the sale of alcohol in general admission because of the potential impact of extra much needed revenue. If alcohol sales represent a decided competitive advantage, or if the revenue from alcoholic beverage sales is the tipping point between the continuity and stoppage of a football program, administrators still should carefully weigh the financial benefits against their mandates and conscience toward social responsibility (cf. Godfrey, 2009). Although major revenue producing football programs may find that the additional benefits from alcohol sales do not substantially benefit the bottom line, schools operating on significantly smaller budgets may define the incremental increase as significant and be more aggressive in their pursuit of this competitive advantage.

Limitations

The higher donation premium attributed to club seats cannot be solely explained by the availability of alcohol as these seats offer other qualitative amenities such as cup holders, chair backs, and extended food selection. Moreover, other factors such as the win-loss record in the immediately preceding year as well as the overall success of the football team in the past couple of years coupled with the expectations placed upon the team also explain donation amounts and ticket demand. Despite the inability to completely separate out the alcohol premium, alcohol availability undeniably plays an integral role in driving demand and donations as evidenced through the example of the club level seats.

The outsourcing of concessions provides several advantages, including minimizing liability in case of adverse events due to alcohol consumption and reallocating the resources of the athletic department to oversee and focus on other components of the game day experience—significant cost items. However, the primary disadvantage of outsourced concessions is that the athletic department does not fully reap the profits derived from all sales of food and beverages. Without the concessionaire, the difference in revenue between alcohol and no alcohol is $1,956,525; however, if outsourced, the difference in revenue decreases to $576,001, approximately 70% less. Nonetheless, without outsourcing, additional costs such as increased employment expenses (e.g., salary, training, health insurance) or overhead must be considered, which invariably lower net profit. Furthermore, as more individuals participate in alcohol consumption, increased safety measures must be taken to mitigate risks and unforeseen consequences, resulting in higher compliance and insurance costs. Although these expenses do not directly impact the athletic program's revenue in the current structure, they will decrease the concessionaire's profit margins, which in turn, may cause renegotiation of contractual percentages to accommodate these higher costs. The football program will, however, incur additional expenses in the form of hiring more police officers, security personnel, and emergency health staff so as to ensure a safe and college-friendly atmosphere.

In addition to concessions, the lucrative profits of the National Football League also lie in the advertising rights given to alcoholic beverage companies. The quantitative data in this paper explore the benefits strictly from alcohol consumption as reflected in concession revenue and not profits from advertising and marketing campaigns. The latter is left unexplored due to the lack of precedence and research material in the area. Although concessions have minimal impact, these multimillion dollar contracts between schools, conferences, and beer companies for advertising rights inside stadiums as well as during television broadcasts will significantly and positively impact the bottom-line so as to further justify the sale of alcoholic beverages to the general public.

Other factors, such as the winning record and the expectations of the football team, contribute to the demand and sale of tickets. Fans' expectations stemming from the past seasons' success as well as potential berths in postseason bowls may also contribute to donation premiums and increased ticket sales. The premium attributed solely to alcohol cannot be extrapolated from the amount that fans willingly pay as a result of increased expectations. However, the incident of the club seating demand increasing with alcohol availability epitomizes the instrumental nature of alcohol in selling seats. The $50 increase from the alcohol-free year to the alcohol-implementation year represents a plausible figure from which further research may demonstrate the proportion attributable to alcohol.

Conclusion

The initial question posed was whether the financial profits earned by colleges could justify the sale of alcoholic beverages to the general public on game days. If so, schools then must strategize to balance the financial, social, and ethical implications. Because many parallels exist between collegiate and professional football, various areas of the NFL profit-maximizing model could be implemented at the college level. This then provides guidance and a framework as to mitigating behavioral risks and negative consequences.

However, one controversial aspect of the NFL structure is its continual bombardment of alcohol advertisement. The university is a nonprofit institution whereas the NFL is a professional organization that exists solely to earn profit. To maximize profit, the NFL thus incorporates all possible streams of revenue, including the sale of alcoholic beverages and advertisements despite the associated risks, while attempting to maintain a family-friendly atmosphere. Universities, on the contrary, do not pay students to play football; and as such, maximizing profits in any possible manner appears paradoxical to its nonprofit nature.

At the collegiate level, the inundation of alcoholic beverage names, pictures, and product sends mixed messages to students. Research shows an individual's choices with regards to alcohol consumption depend on the drinking patterns of his or her peers (Neighbors et al., 2006). Thus, underage students surrounded by individuals consuming alcohol causes unnecessary peer pressure. Additionally, further research has shown a positive relationship between the availability of alcohol in the campus environment and its consumption, particularly binge drinking (Chaloupka & Wechsler, 1996). With the documented problems surrounding high-risk drinking among college students, condoning alcohol consumption through alcohol sales and advertisements on game days to the general public only worsens the perilous situation.

Because the ethical and social dilemmas outweigh the financial benefits, the implementation of alcohol sales will detrimentally diminish the fan experience. Moreover, the profit-maximizing method of obtaining season ticket sales via a nonprofit organization does not necessitate the athletic department to consider other revenue drivers. From any perspective with which one considers the possibilities, at State University the athletic department should continue its current revenue structure and not sell alcohol to the general public. Moreover, because a large percentage of game spectators are underage students, this will further strengthen the university's image as a socially responsible educational institution.

Notes

1. For the privacy of the school and the anonymity of the author, the names of the institutions and relevant parties have been removed. All data and information for this case, however, are based on factual data and existing resources except where otherwise noted.

2. State University belongs to a greater body of universities, which altogether comprise the State University System. The Board of Regents oversees the State University System as a whole as well as each individual member school within the system, including State University.

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