

**Financial Trends in Intercollegiate Athletics Mirror Financial Trends in
Higher Education**

by

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Abstract

This study compared the financial trends that occurred in intercollegiate athletics with the financial trends that occurred at institutions of higher education. The study focused on the 86 public institutions in the Football Bowl Subdivision (FBS) and an analysis of the data was conducted for fiscal years 2006–2012. The study identified four specific areas in athletics and four specific areas at the institution of higher education that were similarly situated for the purpose of comparing financial trends. The areas compared for the purpose of this research were ticket sales (athletics) and tuition (institution), media rights and licensing (athletics) with grants and contracts (institution), contributions (athletics) and gifts (institution), and subsidies (athletics) and state appropriations (institution). The research also examined financial trends within the FBS by comparing the institutions in the five power conferences — Atlantic Coast Conference (ACC), BIG Ten, Big 12, Pacific 12 (PAC 12), Southeastern Conference (SEC) — with the remaining conferences and member institutions within the FBS.

The data were gathered by reviewing public information, and the analysis of the data were performed by utilizing a within subjects ANOVA to compare financial trends in intercollegiate athletics with financial trends of institutions in higher education.

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Dedication

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CHAPTER 1. INTRODUCTION

The financial challenges that exist in higher education create a heightened awareness of the revenue being generated in intercollegiate athletics. The lack of funding available to offer more academic courses and enhance academic programs offered on campus is often perceived as a direct reflection of how intercollegiate athletics is an impediment to academic initiatives at institutions dedicated to higher education (Strupeck, Milani & Murphy, 1993).

The issue of funding in higher education is a constant topic of discussion due to the economic challenges that currently exist. The limited funding available creates the necessity for organizations to evaluate where funds are being allocated to determine if dollars are being maximized. When institutions of higher education subject themselves to such an analysis, it fosters an environment for conversations about the positive and negative impacts of sponsoring intercollegiate athletics. The perception exists that intercollegiate athletics compromises the mission of the institution, due in large part to the financial commitment required to fund a department dedicated to intercollegiate athletics. The issue is not only funding for athletics that could be allocated toward academic initiatives, but also the perceived negative impact athletics has on the overall mission of the institution. The inclusion of athletics on a college campus is thought to alter the focus from academic objectives and directs the focus away from the mission of

the institution, because less funding can be dedicated to higher education when funds are being allocated to athletics (Sylvester & Witosky, 2004).

Some studies contend that the existence of intercollegiate athletics on a college campus may increase the national visibility and provide an opportunity for the institution to utilize intercollegiate athletics as a platform to promote many of its academic initiatives. The presence of intercollegiate athletics in higher education can be very beneficial to an institution of higher education and, when properly managed, the benefits outweigh any of the perceived risks to the academic reputation of the institution (Sternberg, 2013).

The institution has a primary mission of facilitating education and expanding knowledge through research, but the evaluation of the institution will be heavily influenced by an analysis of the financial health of the organization. The harsh reality is the institution must consider the fiscal aspect of the equation in order to provide the best quality educational programming to the students. It is important to consider the institution is a not-for-profit organization with the primary mission of serving students, and all dollars allocated to the institution must be maximized, so the institution can continue to grow, develop and most importantly, attract new students (Weisbrod, 1983).

The intercollegiate athletics department, as well as the institution, understands the importance of fiscal management to encourage the attendance of prospective students and to support the social, emotional and academic efforts of students currently attending the institution (Leslie & Brinkman, 1987). The purpose of this research is to review how financial trends in intercollegiate athletics occur in order to compare how closely it resembles financial trends that occur at an institution of higher education.

Statement of the Problem

A perception exists that intercollegiate athletics often compromises the mission of the institution when revenue is allocated from the general fund to support athletics and student fees are increased to support the academic objectives of the institution (Sperber, 2000). The culture of intercollegiate athletics and higher education promotes competition and fosters an environment that promotes spending funds in order to attract prospective students, as well as prospective student-athletes, and to retain the students currently attending the institution (Desrochers, 2013).

Expenditures for athletics are generally handsome and expenditures for academics often are insufficient. Although funding is allocated to support intercollegiate athletics at a high level, the manner in which finances are managed in intercollegiate athletics is comparable to the manner in which financial management occurs at the institution (Desrochers, 2013). This study compared financial trends in intercollegiate athletics and how those mirror financial trends in institutions of higher education. The study involves the selection of pre-determined variables in intercollegiate athletics and the institution that are comparable in order to determine the manner in which finances are being managed in both areas.

Purpose of the Study

The purpose of this study was to compare the financial trends in intercollegiate athletics with the financial trends in institutions of higher education. The research was conducted by analyzing all the public institutions in the National Collegiate Athletic Association (NCAA) Football Bowl Subdivision (FBS) in order to evaluate and compare how revenue is generated at each of the institutions. The analysis was conducted for a

seven year period from 2006–2012, and the data were reviewed for the purpose of conducting a comparative analysis of similarly situated variables in intercollegiate athletics and institutions of higher education. The variables were selected based on the commonalities that exist between the pairs of categories in both intercollegiate athletics and the institution. The research also focused on an analysis of the institutions within the five power conferences (ACC, Big Ten, Big 12, PAC 12, SEC) by comparing them with the remaining conferences and member institutions within the FBS.

Research Questions

The study examined the following questions:

1. How do the trends in ticket sales (athletics) and tuition (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?
2. How do the trends in media rights and licensing (athletics) and grants and contracts (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?
3. How do the trends in contributions (athletics) and gifts (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?
4. How do subsidies (athletics) and state appropriations (institution) compare for members of the five power conferences and the balance of the FBS during the two most recent years of the study?

Hypotheses to Research Questions

- 1) Research Question 1 and Hypotheses: The comparison between ticket sales (athletics) and tuition (institution) is hypothesized to show an upward trend.
- 2) Research Question 2 and Hypotheses: The trend in media rights and licensing (athletics) and grants and contracts (institution) is hypothesized to show an increase, with media rights and licensing trending upward at a higher rate.
- 3) Research Question 3 and Hypotheses: The trend in contributions (athletics) and gifts (institution) is hypothesized to trend upward at a comparable rate.
- 4) Research Question 4 and Hypotheses: The trend in subsidies (athletics) and state appropriations (institution) is hypothesized to show a decrease, with subsidies trending downward more gradually, while the state appropriations would display a more drastic decline.

Significance of Study

The study will contribute to the growing body of knowledge regarding the financial trends that occur in intercollegiate athletics and within institutions of higher education. The study expands on the research that views athletics-related revenue in a similar manner to revenue generated in higher education. This is an important distinction because under tax laws that govern institutions of higher education, both the institution and the athletic department are tax exempt (Appleby, 2010). This study will provide a great deal of insight to both administrators in intercollegiate athletics and higher education as they work diligently to manage the financial resources being generated to support the demands of the students they serve. The information will also be beneficial in evaluating the impact or perceived impact that intercollegiate athletics

has on increasing notoriety for the institution and the revenue being realized in the academic departments on campus as a result of intercollegiate athletics (Woods, 2011).

The research has the potential to display the disparities that exist between members of the five power conferences and the balance of the FBS. Such findings can inform discussion within the association on topics such as competitive equity, recruiting equity, student-athlete welfare, amateurism, and increased autonomy for members of the five power conferences.

Limitations of the Study

The research has limitations that are important to consider as one reviews the information being presented in this study. The data being utilized were obtained from data gathered by the National Collegiate Athletic Association (NCAA). The specific information is contained within an internet website that can be accessed by any computer with internet access. It is important to note the information on the website contains data that are available to the public. Some of the FBS institutions did not have complete data sets publicly available both from the athletic department and the institution of higher education. The public data utilized in this study from intercollegiate athletic departments were not available for the private institutions and were not included for the purpose of this research. The public FBS institutions with missing data that could not be obtained via the web were initially contacted via e-mail and were contacted by telephone to request the missing data. The researcher provided those FBS institutions with missing public data a three week time period to respond to the inquiry for the missing data in order to report on the findings while the topic is relevant. The study was limited by the time constraints enforced by the researcher because additional

time for a response may have yielded a larger rate of response. The researcher excluded all institutions from the research without a complete set of data for the seven years represented in the study. The study did not include any of the institutions that are considered private because a requirement does not exist for the public disclosure of financial statements from institutions deemed as private. The website can be accessed at <http://www.usatoday.com/sports/college/schools/finances/>. The data were gathered via reports submitted by each institution with criteria identified by the NCAA. The limitation of the data that were gathered existed as a result of the quality of the data gathered from the information provided by the NCAA and reported by USA TODAY, but are nonetheless superior to data that could be obtained from the Equity in Athletics Disclosure Act Report (EADA). The institutional data were derived from Audited Financial Statements and due to external review are deemed superior to data that could be gathered utilizing the Integrated Postsecondary Education Data System (IPEDS). A limitation that also exists involves the presumed standardization of the information obtained via the NCAA data and revenue expense reports which are submitted by each institution as a result of different individuals compiling the data required to be reported to the NCAA. The information is imperfect as a result of the submission process and although the information is obtained from financial statements reported by the institution which should be relatively consistent, a possibility exists data were reported inconsistently. The study was conducted by utilizing the quantitative method to analyze the data, and a within subjects two-way ANOVA with repeated measures allowed the data from intercollegiate athletics to be compared with academic data from the institution of higher education.

Delimitations of the Study

The researcher selected a convenience sample from all of the FBS public institutions with complete data for the seven year period and excluded all institutions with incomplete data. The study provided a three week time period for a response from the institutions with missing or incomplete data. The study does not represent financial information from other divisions (i.e. Football Championship Subdivision (FCS), Division II, Division III, etc.) or non-NCAA athletic programs. The study did not utilize a random sample and data utilized for this research is comprised of all public FBS institutions with complete data during the years of 2006–2012. The data were comprised of public information for departments of intercollegiate athletics and institutions of higher education.

Assumptions of the Study

This study was conducted based on the following assumptions:

1. The data reported by each institution were reported accurately and honestly in a similar manner.
2. The institutions included in the data set are comparable to all other similarly situated institutions and the sample size is large enough to accurately reflect the information obtained in the study.
3. The variables being compared from intercollegiate athletics and higher education are comparable and provide an accurate depiction of how financial management of revenues is similar.
4. The institutions represented in the study were selected as a result of financial information reported to the National Collegiate Athletic

Association (NCAA) and it includes the institutions which generated the most revenue as reported in fiscal year 2012.

Definition of Terms

Dashboard Indicators (NCAA data and revenue expense reports) – A term defined by the NCAA as a means to benchmark the academic and financial data provided to the NCAA by institutions of higher education. The NCAA Dashboard Indicators are comparators that allow member institutions to quickly evaluate how their academic and financial data compare to up to three institution-defined peer groups of institutions as well as the following group comparators: conference, sub-division, public-private designation, and athletic expense budget level. The group comparator value associated with a specific institution is shown by default.

Division I – A term established by the NCAA to describe a division that exists within intercollegiate athletics at institutions of higher education. The classification of Division I represents the institutions that receive the highest level of athletic funding and as a result institutions considered to be Division I have the most stringent requirements for athletics participation. Division I institutions are perceived as the goal for other intercollegiate athletic programs, because the standards for these institutions are higher than the standards for institutions in other divisions. Division I institutions more often generate more revenue, and are mandated by NCAA legislation to sponsor a greater number of athletic teams. The requirements to be a Division I member also include that institutions maintain a higher number of fans in attendance at sporting events. The Division I institutions are required to meet higher academic standards in order for student-athletes to be eligible to practice, compete and receive athletically-related

financial aid. Institutions in Division I are also able to provide more athletic scholarships and more opportunities for student-athletes to receive financial aid.

Football Bowl Subdivision (FBS) – As defined by the NCAA Academic and Membership Affairs Staff (2011), FBS classification represents the highest level of college football competition in the NCAA and the United States. FBS institutions must meet additional requirements, beyond those of other Division I institutions. These requirements include, but are not limited to the following: sponsoring a minimum of sixteen varsity intercollegiate teams, with at least eight all-female teams, scheduling and playing at least 60 percent of games against other FBS schools with an ability to schedule the remaining 40 percent against FCS teams, providing an average of 90 percent (which equates to 85) of the permitted maximum number of overall football grants-in-aid per year during a rolling two year period, offering a minimum of 200 athletic grants-in-aid or expend at least four million dollars on grants-in-aid to student athletes, average home attendance of at least 15,000 (over a rolling two-year period), and several other standards which exceed the requirements of all institutions not included in the FBS.

Football Championship Subdivision (FCS) – The FCS represents the second tier or (most often) smaller Division I institutions. The definition of FBS places great emphasis on scheduling, fan attendance, financial resources and various other requirements. The NCAA-mandated requirements for FBS institutions are adopted to create parity; therefore, the requirements are far less for institutions participating in the FCS. The FCS also does not participate in post-season bowl games, but has a playoff

system where teams are selected and compete in a single elimination tournament until one team is crowned the champion.

Governmental Accounting Standards Board (GASB 34) – This Board establishes financial reporting standards for state and local governments, including states, cities, towns, villages, and special-purpose governmental bodies such as school districts and public utilities. It establishes that the basic financial statements and required supplementary information (RSI) for general purpose governments should consist of the Management's Discussion and Analysis (MD&A) as well as basic financial statements.

Intercollegiate athletics – The term encompasses the non-professional, collegiate and university-level competitive sports and games requiring physical skill, and the systems of training that prepare athletes for competition.

National Collegiate Athletic Association (NCAA) – An organization created for the purpose of regulating sporting activities that occurred at institutions of higher education. The purpose of the NCAA is to improve the safety, competitive equity and recruiting equity in intercollegiate athletics programs for student-athletes, while maintaining a diligent focus on the emotional and social welfare of these students. As a governing body the NCAA provides policies and regulations designed to maintain equity and amateurism in sports as well as promote academic standards to ensure student-athletes are in a safe environment to participate in athletics and progressing academically toward completion of a baccalaureate degree.

Non-Revenue Generating Sports (NRGS) – The sports in an intercollegiate athletic program that do not generate any revenue for the institution. The sports in this

category typically will comprise the majority of the sports in an intercollegiate athletic program. The sports included in this category are usually sports other than Division Football, Division I Men's Basketball, Division I Baseball, and Division I Women's Basketball programs.

Revenue Generating Sports (RGS) – These are typically Division I FBS football programs, Division I Men's Basketball programs, Division I Baseball programs and Division I Women's Basketball programs that generate revenue for their institutions. These schools also typically have the largest athletic budgets of NCAA member institutions.

Statement of Revenues, Expenses and Changes in Net Assets (SRECNA) – The term recommended by GASB 34 for the operating statement in public colleges and universities. This is a statement similar to the income statement in a for-profit business. The preferred statement changed from Statement of Revenues, Expenses and Changes in Net Assets to Statement of Changes in Net Position. The provisions of this new statement are effective for financial statements in fiscal years that begin after December 15, 2011.

Student-Athlete – As defined by the NCAA 2012–2013 NCAA Division I A Manual (Effective August 1, 2012), "A student-athlete is a student whose enrollment was solicited by a member of the athletics staff or other representative of athletics interests with a view toward the student's ultimate participation in the intercollegiate athletics program. Any other student becomes a student-athlete only when the student reports for an intercollegiate squad that is under the jurisdiction of the athletics

department, as specified in Constitution 3.2.4.5. A student is not deemed a student-athlete solely on the basis of prior high school athletics participation.” (p. 28)

Organization of the Study

The first chapter of the research will provide information regarding the purpose for conducting the study. The second chapter will include a review of literature pertaining to the aforementioned research questions. The third chapter will involve the methods utilized to obtain the data for a statistical analysis to occur. The fourth chapter will include the findings as a result of conducting the study and the fifth chapter will describe what the research data imply as well as any suggestions and/or recommendations for future research.

CHAPTER 2. REVIEW OF THE LITERATURE

History of Higher Education

The oldest institution of higher education in the United States is Harvard University which was founded in 1636 (Archibald, 2002). During the Revolutionary War, there were nine chartered degree-granting colleges established in the colonies. It is difficult to appreciate how great an accomplishment this was until you compare the United States to England, which had a larger population and more wealth. The only degree-granting colleges in England at this time were Cambridge and Oxford (Trow, 1988). The colonial colleges – Harvard (1636), William and Mary (1693), Collegiate School (which became Yale) (1701), College of New Jersey (Princeton) (1746), King's College (Columbia) (1754), Academy of Philadelphia (University of Pennsylvania) (1755), College of Rhode Island (Brown) 1764, Queen's College (Rutgers) (1766), and Dartmouth (1769) – were based on an operational model designed to replicate Cambridge, as well as Oxford (also known as the "Oxbridge" model). The pastoral setting provided an environment to focus on religion and the creation of structured teaching, which was an integral part of the college experience, just as it was in England (Haskins, 1923).

The mission and administration of these early colleges had a focus on spiritual studies "in line with the spirit of religious tradition" that accompanied colonial America's early years (Brickman, 1972). A college education was relatively exclusive. The costs

of operating a university made the price of an education cost prohibitive for most people. America was already providing an array of options to that specific demographic of wealthy White men, the majority of whom were interested in becoming members of the clergy (Archibald, 2002).

Thomas Jefferson had a philosophy of an ideal higher education system entitled “the lecture method, the elective system” which would become an integral part of colleges in the United States. This did not include a religious component. The philosophy revolved around “the benefits education could provide to citizens through teaching citizens and leaders” (Addis, 2003).

Trow (1988) stated the institutions of higher education work diligently to create an environment that appreciates a vast array of cultures and promotes an attitude of inclusion of all people. The institutions are also fundamentally rooted in a spirit that works to create equality among all of the students on the campus. This works well in the American culture, because it is believed the system in the United States should be structured in a way to appeal to all parties.

History of Intercollegiate Athletics

The first organized intercollegiate competition in America occurred when Yale initiated a rowing competition against Harvard in 1852. This first organized competition was won by Harvard (Nisonger & Meehan, 2007). The sport of rowing was chosen because it was a huge spectator sport at the time and ironically was a favorite because of the gambling activity that occurred on the events. The popularity of rowing marked the beginning of intercollegiate competition and triggered the creation of numerous college athletic organizations (Weil, 1996).

The popularity of the sport of rowing resulted in the spread of intercollegiate sports at peer institutions. The growth of intercollegiate athletics created a platform for institutions to increase spectator involvement, and this increase resulted in unintended problems for the institution to resolve. The institutions were forced to manage scandals surrounding intercollegiate athletics which had the potential to damage the reputation of the institutions. The management of these issues resulted in the creation of conferences to manage issues regionally, and an organization was also formed to address issues nationally. The National Collegiate Athletic Association (NCAA) was created in 1906 under the name of the Intercollegiate Athletic Association of the United States (IAAUS) and was developed as a national organization to intervene on issues involving intercollegiate athletics, principally safety (Flowers, 2009; Suggs, 2005).

The IAAUS initially focused on the injuries and deaths that were occurring to college students participating in the sport of football in intercollegiate athletics. The IAAUS became known as the NCAA in 1910 and continues to exist under that name. The NCAA has evolved since its inception, but has retained one of the initial core issues, the welfare of students. The NCAA operates today with three core principles in mind. The organization has a specific focus on creating competitive equity, recruiting equity and student-athlete well-being. The concept of student-athlete well-being is a derivative of the core principle that created the existence of the organization in the early 1900s (NCAA, 2010a, 2010b).

The NCAA has implemented several initiatives to ensure the vision of the intercollegiate model remains a concern for all parties involved in the business of educating students. The student-athletes are enrolled at institutions of higher education

as amateur athletes, but the ever changing face of the business of college athletics is creating a delicate balance for students, coaches and administrators to navigate. The financial gains an institution can experience with the revenue generated in college athletics places institutions in a position to devalue the educational experience of students participating in athletics (The Knight Foundation, 2001). The student-athletes today are more aware of the big business of college sports and the public microscope under which their involvement places them. The notion of amateurism is changing, especially in the Power Five due to recent legal cases, such as the *Keller v. Electronic Arts (EA)*, *NCAA*, and *Collegiate Licensing Company (CLC)*, as well as *O'Bannon v. NCAA*, cases which were filed due to it being impermissible for student-athletes to share in the financial profits earned from their athletic participation. The new forms of media, in combination with the large sums of money being generated by intercollegiate athletics, have increased the public appetite for news pertaining to student-athletes (Adler & Adler, 1985; Dennie, 2012)

Financial Trends in Higher Education

The financial trends at institutions of higher education are now focused on revenue streams at a heightened level due to many of the economic issues that exist. The public state appropriations have fallen from 50 to roughly 30 percent. The current trend is privatization, because at most prominent public institutions state funding comprised less than ten percent of the institution's operating budget. The reduction in state funding has placed an impetus on institutions to be creative and innovative in identifying new sources of revenue to support higher education (Lyall & Sell, 2006; Zusman, 2005).

The changes in higher education are a result of the cost in higher education rising at a considerably higher rate than revenues available, specifically revenue that is derived directly from taxes. The issues pertaining to cost and revenues are direct reflection of three principle issues: rapidly increasing unit or per-student costs, increasing tertiary level participation, or combined impact of university-age population and the increasing higher education participation rates of this group, and a dependence on governmental support which is decreasing. The issues have a financial impact on the institutions of higher education and institutions have considered two ways to address rising costs and reductions in revenue: examine ways to cut costs (substituting lower-cost junior or part-time faculty for higher-cost senior faculty, lower faculty-student ratio by increasing average class size, increasing teaching loads) and/or maximize all viable sources of revenue generation. The model at institutions to maximize revenue potential is through research. Research conducted in higher education seeks to utilize external funding, while maintaining a university-centered approach. The recent financial trends are being implemented to capitalize on this concept to create universities that are less reliant on federal and state funding (Johnstone & Marcucci, 2007).

The institutions of higher education have recognized the benefits of developing a collaborative relationship with large corporations that specialize in a particular area. The partnership provides an opportunity for the institution to outsource the specific work function, which creates a cost effective business model and provides an economical way to fund research initiatives. The economics of higher education has changed and as a result an increase in costs associated with higher education, is a significant factor being discussed by institutional administrators, as well as current and prospective

students. The students, as well as the federal government, incur these costs, and institutions are actively pursuing opportunities to partner with outside organizations in order to decrease costs. The partnerships not only serve as a means to generate revenue, but to minimize the loss of revenue involved in conducting research. The ability to decrease the financial burdens on students, creates a model for higher education to be more affordable to the masses (Heller, 2001).

Financial Trends in Intercollegiate Athletics

Frank (2004) contends the profitability of intercollegiate athletics is less important than the notoriety gained by an institution. The normal principle in determining the sustainability of a business is to determine the potential for earning profits. The intercollegiate athletics model does not follow this principle because the reward earned is not determined by the absolute quality of the business, but by the relative quality of the business. The business of intercollegiate athletics is sometimes referred to as a winner-take-all market.

The winner-take-all market differs from ordinary markets in that everyone who participates in the process will incur a cost whether or not they benefit from their involvement in the process or not. The concept is often compared to the process that occurs at an auction, except that all the bidders are responsible to incur the costs associated with their bids even though only one person is awarded the bid (Frank, 2004).

The Football Bowl Subdivision (FBS) institutions derive the bulk of the budget for athletics from funds raised by athletic operations, but this is not always true for non-power five institutions. The majority of funding at FBS institutions can be reviewed by

simply analyzing the budget in athletic departments during the year of 2010. The revenue generated from athletically related functions comprises over 80 percent of the budget of the average FBS institution (Desrochers, 2013).

The three principal sources of revenue for power five athletic departments are ticket sales, donations, especially for priority seating, and media rights and licensing. The largest source of revenue for FBS athletic departments is ticket sales. A great number of FBS institutions are also financially dependent upon donations from supporters of the athletics department. The money generated from television contracts and current media contracts are also an integral component of the financial model of the FBS (Desrochers, 2013).

The intercollegiate athletics model is undergoing an analysis of ways in which social media can be utilized for the purpose of generating revenue. The creation of social media has provided a platform for departments of intercollegiate athletics to provide content to consumers in a manner that has not been comparable in previous years. The departments of intercollegiate athletics are also competing with technology which has become both innovative and inexpensive allowing the consumers to have an experience at home that rivals some aspects of viewing the event at the competition site (Clavio & Walsh, 2014; Harris, 2012; Tomko, 2011; Wieberg, 2012).

Revenue Sources in Intercollegiate Athletics and Higher Education

The Role of Ticket Sales as a Revenue Source

The sale of tickets for events represents the most prominent source of revenue generation the intercollegiate athletics departments have the ability to directly control (James & Ross, 2004). The sale of football tickets can be a great revenue generating

opportunity if there is a large seating capacity in the football stadium. The large stadium seating represents the potential to increase revenues for an intercollegiate athletics department. The athletic departments often implement what is known as a two-part tariff with the sale of football tickets. The two-part tariff involves a system with the cost for the purchase of a season ticket and an ability to obtain a mandatory contribution to the athletic department. The mandatory contribution can provide the ability to purchase specific seating as well as an opportunity to receive other exclusive benefits (Hochman & Rodgers, 1969). The contribution provided to a college or university to receive the right to purchase tickets to an athletic event gives the donor an opportunity for 80% of the payment (excluding the cost of the tickets) to be deductible as a charitable contribution, per Internal Revenue Service (IRS) regulations. The tax benefits that accompany contributions that occur in conjunction with the purchase of tickets, provides an incentive for ticket purchases (U.S. Department of the Treasury, 2013, page 3).

The sale of tickets accounted for 29% of the revenue generated at FBS institutions in 2010. The ticket sale revenues for these athletic departments resulted in median sales that yielded over \$9 million (Fulks, 2010).

The current concern regarding ticket sales in FBS football is the decline in attendance. The ability to generate interest to the fans to attend games is at the forefront of conversations among leaders of intercollegiate athletic departments. The home attendance at major college football stadiums continues to decline and in 2014 the average attendance was at its lowest in 14 years. The FBS home crowds averaged 43,483 fans per game, which is a four percent decline from 2013 and the lowest since the year 2000 when the average was 42,631 (analysis conducted by CBSSports.com of

NCAA attendance data). The figures included in the analysis represent only home contests (neutral sites contests are not included) and are announced crowd attendance totals reported by the school, which may not be indicative of actual crowd attendance (NCAA.org, 2014; Solomon, 2014).

The figures pertaining to the decline in attendance represent the average numbers reported for all institutions in the FBS. The information appears a little differently when you review the numbers from the perspective of the top 25 attendance leaders in the FBS. The encouraging information from a data analysis shows that 72 percent of the top 25 attendance leaders experienced increases or remained the same in average attendance (all of the top 25 were from the Power Five conferences or Notre Dame). However, of the institutions in the FBS outside the top 25 attendance leaders, only 48 percent of the remaining Power Five schools maintained or increased their crowd average, and a large number of institutions in the smaller conferences experienced a decline (NCAA.org, 2014; Solomon, 2014).

The latest trends being implemented to encourage fan attendance are the concepts of “variable and dynamic ticket pricing”. A variable ticket pricing model sets ticket prices before the start of the season based on the anticipated demand from customers for a specific game in the future. The price for games that were expected to have great demand would be higher than other scheduled games (Leeds & Von Allmen, 2004).

The concept behind dynamic pricing refers to using the demand for game tickets to dictate the price of a ticket for a specific contest. The concept is similar to that of variable pricing, with the key exception being the price adjustments occur during the

season. Dynamic ticket pricing also provides an opportunity to implement strategies to capitalize on revenue opportunities for each game (Leeds & Von Allmen, 2004). The games which are deemed to be high demand will most likely result in a higher price point for tickets sold to that particular contest, and games with lower demand will have a lower price point (Williams, 2012).

The concept of dynamic pricing provides an opportunity to adjust the cost of the tickets per games for the fans. The concept of dynamic pricing can be a means of rewarding the fans for purchasing season tickets early. The professional organizations, as well as the collegiate institutions, understand it is important not to gouge fans with increases in ticket pricing, but also to provide a means of rewarding fans for supporting the team during historically bad weather games, weekday games and/or when competing against inferior competition (Williams, 2012).

The Role of Tuition as a Revenue Source

Higher education is valued financially because it provides the ability for individuals to increase earning potential. The desire to provide citizens with an opportunity to attend institutions of higher education is an admirable goal. The goal to provide advanced educational opportunities in the current tough economic climate requires funding from the government or the students. The funding model will require either an increase in tuition or a decrease in the quality of education provided to students (Archibald & Feldman, 2006).

The decline of state appropriations places a burden on institutions of higher education to examine different funding mechanisms, as well as creative measures to maximize existing revenue sources. Institutions of higher education often rely on an

increase in tuition, which allows students to incur a portion of the deficit in a budget when resources from the state or federal government are limited. However, this model is not realistic because the political environment does not allow a financing structure to exist where a decrease in state appropriations could be entirely offset by students (Kane, 2003).

A Tuition Discounting Survey was conducted by the National Association of College and University Business Officers in 2002, and more than 350 independent institutions from four-year accredited institutions responded to the survey. The purpose of the study was to determine whether changes in the financial aid structure, specifically pertaining to need-based aid, have impacted the ability for students to pursue higher education. The data showed that between 1990 and 2000, the percent of high school graduates enrolled in college jumped by 19 percent. Tuition during this time frame increased by 84 percent at public universities, 65 percent at public two-year colleges, and 77 percent at independent universities, while the consumer price index increased by 32 percent. The enrollment during this ten year time period increased by 7 percent, which indicated that during that time access to opportunities in higher education increased. The data indicated tuition discounting negated elevating tuition costs and created a viable opportunity for students to pursue higher education (Lapovsky & Hubbell, 2003).

The compromise to placing the majority of the financial responsibility for budget deficiency on the student is the concept of tuition discounting. Tuition discounting provides the institutions with an ability to provide grant funding to students with academic merit scholarships and provide funding to a student that is not based on

financial need. This is based on the belief that enrollment and net revenue would increase, which would provide a benefit to the enrollment-management plan of the university (Redd, 2000).

Tuition on the Rise

The concept of revenue generation from ticket sales in intercollegiate athletics compares favorably with the model implemented for tuition at institutions of higher education to support academic initiatives. The institutions of higher education are constantly working to create revenue streams to assist in the development and enhancement of academic programs on the university campus. The reduction in state appropriations to institutions across the country has significantly impacted the public funding specifically designated to institutions of higher education (Robst, 2001).

The need to increase revenue generation has resulted in alternative ways of creating revenue without implementing uniform tuition increases. A tuition model which differentiates tuition by level (undergraduate, graduate or by professional school), by majors, or even by courses is known as differential tuition. Individual students could benefit from a structure where educational costs are assigned to each department and the tuition charged to a student is a direct reflection of those costs. The other benefit is that it would allow individual institutions to better focus resources on the interests of students and create an environment that promotes specific majors, as well as degree programs. The institution would be able to analyze enrollment and determine where it is necessary to allocate resources devoted to promote higher education. The institution would then be able to strategically decide where additional increases in resources are

necessary and determine what departments are not feasible to continue based on student interest (Berg & Hoenack, 1987).

The institutions must maintain a focus on the consumer to create a system in higher education that produces a product that has better quality, higher quality of service to students, and does not increase costs. The adjustment to alter the specialization of curriculum and course offerings is one solution that could enhance instructional efforts and maximize the efficiency, as well as the expertise of faculty. The offering of multiple academic pursuits into the curriculum contributes to increased costs of student education. It is important to minimize the specialized courses and involve faculty in a simplified curriculum which utilize faculty in the instruction of core courses. The distribution of faculty in a core curriculum model would optimize class sizes and ensure highly qualified faculty are not involved in teaching courses to overcrowded or small classes where minimal interest exists. Institutions must combine administrative functions, manage academic resources while changing the role and expectations of faculty to maximize the current structure of the higher education model (Zemsky & Massy, 1990; Zemsky, Massy, & Oedel, 1993).

The educational process was often perceived as a rational and plausible explanation for the rate of tuition rising in a faster manner than inflation. The public institutions are subject to the political process due to the fact the Board of Trustees and other university officials are not in control over tuition or state appropriations (Ehrenberg, 2000). The institutions of higher education must create alternative streams of revenue that do not rely on state appropriated funding and do not obligate students to incur the bulk of the expenses (Kane, 2003; Redd, 2000).

Sponsored or Contractually Earned Revenue Streams

The Role of Media Rights and Licensing

The *National Collegiate Athletic Association v. Board of Regents of the University of Oklahoma, et al.* (1984) addressed NCAA regulations on television and contracts which the court held constituted an unreasonable restraint of trade in violation of the Sherman Act. A “rule of reason” analysis was applied due the unique nature of college football and the NCAA. The court held that the television plan of the NCAA constituted illegal price fixing and established horizontal market restraints which did not allow member institutions to meet the demand from consumers (Scully, 1984).

The first college football game appeared on television in 1938, but by 1953 members feared a reduction of live attendance, so the NCAA began to limit college football telecasts. The NCAA regulated television with network contracts, and beginning 1977 operated in this manner without approval from the membership. The larger members of the college football structure in 1979 formed the College Football Association (CFA), with the purpose of member institutions being involved in the determination of television policy. The CFA attempted to sign a separate television deal, but the NCAA threatened to sanction all NCAA regulated sports that were part of the CFA football television package. The Supreme Court, after thorough analysis of the NCAA television plan, determined the plan unreasonably restricted trade, and the NCAA television contracts were invalidated. The ruling created a free market which resulted in a market driven approach to determine college football television contracts (Scully, 1984).

The CFA after the determination from the Supreme Court worked to sign one year deals with ABC and ESPN, worth \$35 million. The Big 10 and Pac 10 also signed a contract with CBS for \$10 million (Porto, 2012). The increase in the popularity of cable television was impacted by the ruling of the Supreme Court. As cable television subscriptions rose in 1980 from 15.5 million homes to 52 million homes in 1990, the growth in television opportunities for football created additional revenue streams for athletic departments due to the increased exposure (Zimbalist, 2013).

The impact of social media and technological advances has created a cost effective way of allowing fans to enjoy athletic competition in the privacy of their home or via the internet at a mobile location. The challenge for both professional sports and intercollegiate athletics is to find creative ways to increase fan attendance. It is important to utilize the social networking platforms to enhance the fan experience during athletic contests in order to encourage attendance and create an avenue for revenue generation through local sponsors (Torrez Riley, 2012).

The large growth of revenue generated in intercollegiate athletics has been attributable to television media rights. The rights fees for FBS conferences and institutions, as well as the NCAA men's basketball tournament exemplify this growth. The five Bowl Championship Series (BCS) bowl games were responsible for generating revenues in excess of \$174 million dollars annually (Smith, 2011). The NCAA distributed \$505.9 million to the participating conferences and schools for the 39 postseason FBS games. The ESPN television network pays the College Football Playoff about \$470 million a year for the media rights to three playoff games and four other bowl games (ESPN.com, 2015). The men's basketball tournament, also referred

to as “March Madness” (as a result of the tournament being conducted in the month of March), is so highly valued by sponsors that it resulted in a negotiated deal by CBS and Turner for the right to broadcast the event with the NCAA from 2011 to 2028 in exchange for \$10.8 billion dollars (Denhart, Villwock, & Vedder, 2010; Denhart & Vedder, 2011). A sporting event is attractive for marketing a promotion to a sponsor because the tickets are presold, the consumers promote the event by creating excitement around the event, and sporting events are a highly perishable commodity. The unpredictable nature of sports allow the event to build anticipation and momentum around the event which also produces a forum to pitch a product to both a live audience, as well as those watching the live event on television (Mullin et al., 2007, p. 18).

The increase in revenue generated from television has created revenue streams for the premiere institutions, which has resulted in the creation of television programming focused on promoting institutions and selected conferences. The ability to generate revenue from targeted television programming has created an opportunity for a greater divide to occur between the institutions affiliated with larger conferences and the remaining institutions in the FBS (Staples, 2009; Weaver, 2010). In 2009, the Southeastern Conference (SEC) received \$55 million from CBS and \$150 million from ESPN-ABC annually through broadcast rights contracts – \$205 million in total. The revenues in the (SEC) were divided among the 12 member institutions then in the conference and the conference office, with each entity receiving an equal share of approximately \$15 million. (Note: The article reported each of the 12 members received \$17 million dollars. The conference office receives an equal share that is dispersed

within the conference to support the member institutions, so the actual amount directly received from each institution is about \$15 million [SEC Manual, 2012, p. 41]). The Mountain West Conference television deal was closer to \$ 4 million annually, and the Mid-American Conference agreement was about \$ 1.5 million (Toma, 2010).

The pursuit of external streams of revenue to sustain and grow intercollegiate athletic programs at institutions of higher education has become imperative. The lack of financial resources in this tough economic climate has forced intercollegiate athletic programs to seek business opportunities with private sector companies. The intercollegiate athletic departments must work diligently to capitalize on all the relationships which can create a means to generate revenue for both the institution and the athletic department (Giroux & Giroux, 2012).

Giroux and Giroux propose: Lucrative deals that generate massive revenue are made through media contracts involving television broadcasts, video games, and Internet programming. Substantial profits flow from merchandizing football goods, signing advertising contracts, and selling an endless number of commodities from toys to alcoholic beverages and fast food at the stadium, tailgating parties and sports bars (Giroux & Giroux, 2012).

The *White v. NCAA* class litigation in 2006, which focused on student-athletes being able to receive financial benefits up to their actual cost of attendance, resulted in a \$228 million settlement in favor of the impacted student-athletes and challenged the rules governing student-athletes. The class action suit was filed pursuant to the Sherman Act, which stated the NCAA and member institutions engaged in an unlawful agreement to “deny a legitimate share of the tremendous benefits of their enterprise to

the student athletes who make the big business of big-time college sports possible” (Dennie, 2012; "White v. Nat'l Collegiate Athletic Ass'n," 2006). The case filed by Keller in 2009 against Electronic Arts (EA), NCAA, and Collegiate Licensing Company (CLC), alleges the likenesses of student-athletes were used in videogames (Dennie, 2012; “Keller v. Elec. Arts, Inc.,” 2010). The O’Bannon case involved a class action complaint filed in 2009 in the U.S. District Court which sought unspecified damages against the NCAA for the use of student-athlete images, names, likenesses, and identifiable traits sold on DVD’s of championship seasons, television promotions of classic games, action figurines, memorabilia and videogames (Dennie, 2012; "O'Bannon v. Nat'l Collegiate Athletic Ass'n," 2010). The Agnew case was filed in 2010 on the heels of the United States Justice Department announcement of whether the NCAA prohibition of multi-year scholarships violated antitrust laws. Agnew filed suit against the NCAA alleging that scholarship practices of member institutions violated antitrust laws (“Agnew v. National Collegiate Athletic Ass’n,” 2012; Dennie, 2012).

The result was the impetus for current student-athletes awareness of their legal rights pertaining to money being generated from video game sales, commercials, photographs, as well as jersey and apparel sales with their names and/or likeness. It is also a significant basis for their desire to change current NCAA legislation that prohibits them from receiving a share of revenue that benefits their institution. The recent legal cases of Agnew, Keller and the pending case of O’Bannon will most likely have a significant impact on revenue that is generated involving student-athletes from a media and licensing perspective (Dennie, 2012).

Grants and Contracts

The institution of higher education has an important mission to foster an environment conducive to teaching, research and service for all of the administrators, faculty and students who are affiliated with the university. The objectives of the institutions of higher education are noble, but nobility does not pay for the qualified instructors, academic programming and recruitment of exceptional students to an institution of higher education. The institutions of higher education rely heavily on the research of faculty to secure grants and contracts to create a stream of revenue for each of the academic departments on the campus (Zusman, 2005).

An example of an institution where grants and contracts were heavily relied upon as a source of revenue in the budget is the University of Texas at Austin. The University of Texas has received public notoriety as a research institution and it was placed favorably on a national list for its performance in research (US News, 2000). The University of Texas at Austin reported an annual budget of 940 million dollars (UT Austin, 1999, pp. 43–44, 95–123; 1998). The revenue earned from grants and contracts, tuition and endowments was responsible for two-thirds of the budget at the University of Texas. The institution implemented a system that evaluated the current teaching activities with all of the institutions included in the UT system (The State of Texas, 1998). The system determined dollar allocation based on semester credit hours which were impacted by academic discipline, number of students, and level of course. The system for dollar allocation was driven by the consumers in the market or it was linked to performance. The administration at the University of Texas at Austin

distributed money based on where additional resources were needed and performance was not part of the equation (Liefner, 2003).

The ability of an institution to secure revenue with federal research funding became a reality with the passage of the Bayh-Dole Act (Zusman, 2005). The lack of productivity in American industry led to the implementation of the Bayh-Dole Act in 1980 (this was due to concerns that Japan was gaining economic superiority and the United States had to implement a program to stimulate economic activity in order to rival their efforts). The implementation of Bayh-Dole allowed universities to patent results of research that was financed from federal funds. The implementation of this Act paved the way for outside entities and college institutions to engage in a financial partnership (Press & Washburn, 2000).

The faculty members are aware of the importance of teaching and outreach activities, but understand that sponsored research productivity is an objective measure in the evaluation of the quality of the program and faculty in an academic department (Dundar & Lewis, 1998). An effective way for an institution to maximize the potential funding for academic initiatives involving research is to partner with an external organization that can support the research initiatives of the institution. A notable collaboration of this type occurred in November 1998 when the University of California-Berkeley signed an agreement with Novartis, a pharmaceutical company from Switzerland. The financial component of the arrangement provided Berkeley with \$25 million dollars to fund basic research in one of the four Departments of Plant and Microbial Biology. The university entered into this agreement because it represented guaranteed revenue for the university. The partnership created an opportunity to further

research with the potential to generate more revenue. The financial contribution by Novartis funded one third of the research budget and reduced the operating budget of the institution by supporting the costs of research expenses. The partnership was viewed positively due to the economic times, because it was a creative way of generating funding to support a number of the institution's academic initiatives (Press & Washburn, 2000).

The institution has to determine if the ability to receive a large contractual investment from a company is worth relinquishing power over several aspects of a project and/or the ability to influence the direction of the research. The institution must also weigh the value of the contribution against the contractual rights and ownership of intellectual property the company may have during successful research endeavors (Press & Washburn, 2000).

Donated Revenue

Contributions

The importance of contributions to support intercollegiate athletics has been researched as far back as 1968–1969 by Raiborn, who found that in athletic departments participating in Division I football, 5 percent of total revenues were a result of contributions. The topic was researched 13 years later in 1981–82, and contributions comprised on average 11 percent of the revenues earned by athletic departments (Raiborn & NCAA, 1970).

The money generated from donations and contributions has become the second largest source of revenue generated for intercollegiate athletic programs. The money

raised by intercollegiate athletic departments as a result of donations accounts for 23% of the revenue generated within the department (Fulks, 2010).

A model McEvoy, Morse and Shapiro (2013) devised in 2005 was utilized to predict annual fund raising contributions to NCAA Division I member institutions of the FBS. The study yielded five factors that were determined to have the strongest influence on annual athletic contributions. The five factors are as follows, and they are placed in descending order of influence: 1) football home attendance, 2) conference affiliation, 3) football winning percentage, 4) type of institution (public or private), and 5) men's basketball home attendance (McEvoy, Morse, & Shapiro, 2013).

The contributions received in exchange for the right to purchase tickets to an athletic event also provide revenue to the departments of intercollegiate athletics. The donation of funds for the ability to purchase "priority seating" is incentivized due to the fact only 20 percent of the contribution is non-deductible, as is the cost of the actual tickets. However, the 80 percent is generally deductible subject to IRS guidelines (U. S. Department of the Treasury, 2013, page 3).

The success of an athletic program has the ability to produce positive financial results both directly and indirectly. The direct benefits involve revenue generated as a result of higher attendance: ticket sales, concession revenue and television appearances. The indirect benefits are placed into two categories: indirect financial and indirect nonfinancial benefits. The indirect nonfinancial benefits are increased applicant pools, interest of high quality students and increased positive exposure for the university. The indirect financial benefits include increased donations and increased state appropriations for public colleges and universities. It is important to understand

the positive correlation athletic success can have on the institution of higher education and the indirect impact it has on contributions (Goff, 2000).

The other concept that must be explored in the evaluation of contributions is to evaluate the techniques implemented in requests for contributions and the variables that impact the effectiveness of the contribution. The technique of social pressure to contribute is often utilized due to personal relationships and publication of the list of contributors, which can enhance the size of the contribution, as well as the probability a contribution will occur (Long, 1976).

Gifts

The concept of fund raising for an institution of higher education was first introduced in 1640 by Henry Dunster. He assumed the responsibility of acquiring funds, as a result of his position as the first president of Harvard (Cook, 1994). The responsibility to raise funds, as well as the practice of raising funds to support initiatives in higher education, remains a current practice to support the academic mission (Hovey, 1999).

A review of research conducted by Feldstein, who directed the research for the “blue-ribbon” Filer Commission, concluded through his work that charitable contributions are greatly increased because they are allowable as tax deductions. The research was based on tax return data, charitable contribution, “price” tax rates, per-charity disposable income and income classes. The participants reviewed for the study included 187 individuals from the years of 1948–1968 (Feldstein, 1975a, 1975b; Leslie & Ramey, 1988).

Specific categories of charitable contributions were created in a follow-up study conducted by Feldstein (1975b). The study focused on the donors that were in the upper income tax bracket and the research showed this population was sensitive to changes in the price of donations that were a result of fluctuations of marginal tax rates. The particular study provides insight into the understanding of voluntary contributions to colleges and universities. The study is specifically helpful in the understanding of philanthropy, because gifts to institutions of higher education were representative of between eight to ten percent of all charitable contributions (Feldstein, 1975b; Leslie & Ramey, 1988).

The charitable contributions provided to institutions of higher education are derived from six fundamental sources: Alumni, Non-alumni individuals, Foundations, Business corporations, Religious denominations and other. The largest percentage of voluntary financial support, which accounts for roughly 50 percent of the voluntary gifts, is provided by support from private funding (alumni and non-alumni) (Council for Financial Aid to Education, 1982; Leslie & Ramey, 1988). The gifts received from alumni of the university account for about 29 percent of contributions to institutions of higher education, and in 2000 the figure reached \$6.8 billion (Council for Aid to Education, 2001; Leslie & Ramey, 1988).

The establishment of an alumni donor base is an important aspect to consider regarding financial gifts received by institutions of higher education. As a result, it is important to cultivate relationships with alumni in order to appeal to the emotional connection the former students have for the institution. The engagement of the former students will provide an opportunity for institutional officials to convey a number of

negative consequences the institution could face without their financial support (Baade & Sundberg, 1993; Cunningham & Cochi-Ficano, 2002; Okunade 1996).

The support from donors is integral to the mission of institutions of higher education, due to the lack of funding available for important educational initiatives. The funding being provided from outside donors does not represent funding to support non-essential operating opportunities, but has become a critical piece in determining the university budget (Leslie & Ramey, 1988).

Supplemented Financial Support

Subsidies

The issue of subsidizing intercollegiate athletics is always a topic of conversation at institutions of higher education. The ultimate question the institution must answer is the benefit or detriment intercollegiate athletics has on the mission when resources from the institution are allocated to support intercollegiate athletics. The institutions of higher education for many years allocated a small percentage of financial resources on a yearly basis to assist in supporting the intercollegiate athletic departments. The escalation in coaching salaries, renovation and building of new athletic facilities, and focus on a fan day experience, have placed a great deal of financial stress on most institutions of higher education (Weaver, 2010).

According to Hansmann (1980), institutions of higher education are not-for-profit entities and receive revenue from two sources. The first source is charitable donations from people who share the same purpose, such as a church. The charitable donations provided by a church organization would be categorized as a “donative nonprofit”. The second source of revenue which is funded by the sale of goods and/or services is

considered as a “commercial nonprofit”. An example of a “commercial nonprofit” would be a day-care center. Institutions of higher education receive both types of funding and are referred to by Hansmann as “donative-commercial nonprofits”. Therefore, donative-commercial nonprofits subsidize customers by providing a product to consumers that is lower than the cost of production. The ability to allow price to fall below cost is a defining aspect of higher education that occurs for both public and private institutions. The ability to provide a benefit to consumers below cost becomes a benefit to customers of all activities supported by the institution of higher education, which specifically includes customers/fans of intercollegiate athletics.

Some intercollegiate athletics departments rely on subsidies that extend outside the institution to balance budgets. The subsidies received are comprised of fees or the receipt of a portion of the fees from students, governmental support, support from the institution, indirect cost of facilities as well as administrative support for the department. During 2004–2005, subsidies accounted for 30.21 percent of all operating revenues in intercollegiate athletics departments that received such support. A slight increase of 31 percent of the operating revenues in intercollegiate athletics was subsidized during the 2008–2009 academic year for institutions in the FBS (Denhart & Vedder, 2010).

The Mountain West Conference (MWC), Conference–USA, Western Athletic Conference (WAC) and the Sunbelt Conference members receive subsidies in excess of 43 percent of all athletic revenues. The department of intercollegiate athletics at the more powerful and established conferences such as the Big Ten, Big 12 and Southeastern (SEC) receive subsidization which equals less than 6 percent of operating

revenues. Institutions of larger conferences are almost entirely self-financed and do not heavily rely on subsidization (Denhart & Vedder, 2010).

The portrayal of intercollegiate athletics as a subsidized activity can be justified for reasons that extend strictly beyond revenue generation, because it is difficult to categorize most departments of intercollegiate athletics as a profitable business endeavor. The argument for supporting intercollegiate athletics can be better explained as an appropriate investment for the student body, as well as an important component to the vision and mission of the institution. A compelling argument for the existence of intercollegiate athletics involves intercollegiate athletics being an integral activity for students on campus, rather than viewing intercollegiate athletics as a revenue generating source (Thelin & Wiseman, 1990).

State Appropriations

The institutions of higher education are beneficiaries of financial support from the state and federal government (Garvin, 1980). Garvin (1980) argues the funding being provided on a state and federal level to support higher education is important because it has a direct reflection on the prestige of the institution. The respect and admiration of the institution is believed to have a direct correlation on the quantity, as well as quality of the students the university is able to attract. The universities stress this fact to provide a rationale for continued governmental support, and the institutions also argue the benefit it provides in the attraction, as well as retention of key faculty.

The state funding is an important resource for institutions of higher education because it represents the largest item viewed as discretionary in the budget of a state. The state funding designated for higher education elevates when the economy is

trending upward, and it trends downward during tough economic times. The future of state higher education funding is not favorable. A great number of experts believe state tax systems are outdated and state revenue problems will exist even during good economic times. A large percentage of the state economy is comprised of non-taxed services and internet sales. It is further impacted because 40–50 percent of state expenditures are earmarked for mandated programs for K–12 education and Medicaid. Higher education becomes a tempting target to cut whenever the economy weakens, so institutions have to find other revenue sources to tap (Zusman, 2005)

The financial contributions from the state and local governments comprise 53% of the educational revenue utilized to support instruction for public institutions of higher education. The institutions of higher education have experienced years of financial cuts, and as a result in the last five years, state cuts in funding for higher education have been substantial (Oliff, Palacios, Johnson, & Leachman, 2013).

A study conducted by Koshal and Koshal (2000) was performed on 47 of the 48 continental states (Nebraska was excluded from the study based on the structure of the Nebraska State Legislature, because the DEM value, which is configured based on party composition of the state legislature, was not available) and reviewed the reciprocal influence state appropriations have on tuition and tuition in turn, on state appropriations. The study indicated a clear interdependence between state appropriations at public institutions in the US and the price of tuition. The model suggests a two-way interaction where appropriations impact tuition and tuition impacts appropriations. The statistics of the study express that in addition to tuition, state tax revenue per capita, two-year college enrollment and Democratic majority in the state legislature have an impact on

state appropriations. The other variables that were deemed to also impact the relationship of state appropriations and tuition are median family income, out of state enrollment as a percentage of total enrollment, and the region that a particular state is located (Koshal & Koshal, 2000).

The reduction of state funding provided to institutions of higher education has created a necessity for institutions to consider alternative ways to develop and enhance current, as well as alternative revenue streams (Zusman, 2005).

Generally Accepted Accounting Principles: Governmental Accounting Standards Board

The Governmental Accounting Standards Board (GASB), founded in 1984, has the responsibility of establishing generally accepted accounting principles for public sector entities, including public colleges and universities. GASB statement number 63 (GASB 63) provides financial reporting guidance for deferred outflows of resources and deferred inflows of resources (Governmental Accounting Standards Board website; gasb.org).

GASB 63 also has transformed the operating statement, with a change in terminology from a Statement of Revenues, Expenses, and Changes in Net Assets to a Statement of Revenues, Expenses, and Changes in Net Position. The statement of net position, analogous to the balance sheet of a for-profit corporation, should report all assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position. The statement of net position should report the residual amount as net position, rather than net assets, proprietary or fiduciary fund balance, or equity. The term 'net position' represents the difference between the sum of assets plus deferred

outflows and the sum of liabilities less deferred inflows. This difference should be displayed in three components – net investment in capital assets, restricted (distinguishing between major categories of restrictions), and unrestricted (Governmental Accounting Standards Board, gasb.org).

The provisions of this new statement are effective for financial statements in fiscal years that begin after December 15, 2011. The requirements of this statement will improve financial reporting by standardizing the presentation of deferred outflows of resources and deferred inflows of resources and their effects on a government's net position. It alleviates uncertainty about reporting those financial statement elements by providing guidance that did not previously exist (Governmental Accounting Standards Board, gasb.org).

The Financial Impact of Brand Equity

The review of brand equity research conducted by Yoo and Donthu (2000), focused on the positive correlation between brand equity, and financial performance. The evidence suggested that future earning potential of an organization is impacted by brand equity and the perceived quality of the brand creates a consumer base that will pay premium prices for a particular product or service. The concept of brand equity is important to understand because of the financial implications the perception of the brand (institution of higher education, as well as the intercollegiate athletics program) has on both revenue earned, as well as revenue lost on an annual basis.

The term 'brand equity' refers to assets such as name awareness, loyal consumers, perceived quality, and associations that are "...linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service"

(Aaker, 1991, p. 15). The brand equity, as defined by Aaker, is a model that consists of four main components: perceived quality, brand awareness, brand associations, and brand loyalty (Aaker, 1991).

The perception of an institution of higher education is directly impacted by the public perception of the institution. The higher the public perception is of the institution, the more attractive the institution becomes to potential students, faculty, and staff. The choice of a student to attend a college is determined by four factors: image or reputation, location, cost, and the availability of a specific major. The students were asked of the four factors represented, which would have the most impact on their decision. The students most often stated that the image and reputation of the institution would be the greatest reason for their choice of an institution (Sevier, 1994).

The perceived quality in the realm of sports is relative to expectations for wins and the future progress of the particular sports program. The perceived quality has relevance because it is difficult for products and/or sports teams to recover from perceptions of poor quality (Aaker, 1991). As a result of this, sports teams that sustain multiple years of success have a greater perception of quality. The perception of an institution from important public stakeholders of the university becomes synonymous with the identity of the brand. The management of quality is important, because the brand name can be adversely impacted by negative results. The negative results have the ability to compromise the perceived quality, which directly impacts the equity of the brand (Dacin & Smith, 1994; Lawlor, 1998, p. 19).

Similar to a traditional product, sport satisfies some basic wants or needs for its consumer – the spectator (either via in-person attendance or through media outlets).

Sports satisfy the needs of the consumer such as: affiliation, health, entertainment, self-expression, and sociability. The needs are less tangible, but provide a major allure for the spectator due to the unpredictable nature of sports. The leaders and managers in the sport industry understand the unpredictable outcomes and inconsistent performance are inherent aspects of the business, because the sport product is elusive by nature; its value rests on the perceptions of the consumer (Mullin, Hardy, & Sutton, 1993).

The term 'brand awareness' refers to how plausible and easy it will be for the brand name to be recognized (Keller, 1993). Brand awareness in the sporting arena refers to how familiar a consumer of sports is with a particular team. The awareness is the starting point in the development of equity and serves as the foundation for the attachment of other associations (Aaker, 1991). Brand equity is important for three reasons: awareness increases the likelihood that a brand will be considered by consumers, awareness can affect decisions about brand in the product category or consideration set, and awareness influences the development and depth of brand associations (Keller, 1993). The creation of a pyramid of familiarity would suggest that no awareness exists at the bottom of the pyramid and "top-of-mind" awareness exists at the top of the pyramid. The indication for sports teams in this model implies that only a small number of teams would have category dominance and be familiar to consumers (Aaker, 1991; Herr, Farquhar, & Fazio, 1993).

The attribute-based components of brand equity are often reviewed, but there are also intangible, non-attribute-related components of brand equity that also constitute brand associations (Bridges, 1992; Park & Srinivasan, 1994; Shocker, Srivastava, & Ruekert, 1994). The intangible qualities have been categorized in three dimensions:

favorability (favorable or unfavorable), strength (quantity and quality of processing brand image), and uniqueness (sustainable competitive advantage) (Keller, 1993). The concept of brand association in a sports context would represent both the emotional identification with a specific team and the excitement experienced from attending a sporting event. The combination of tangible and intangible attributes creates a brand identity, “a unique set of brand associations that the brand strategist aspires to create or maintain,” which drive brand associations (Aaker, 1996, p. 68).

The concept of brand loyalty is the ability to attract and retain customers (Aaker, 1991). The inconsistent nature of sports creates a great degree of difficulty in the area of customer retention. The satisfaction of a customer is the primary factor for repeat purchasing to occur. Unlike traditional business where tangible benefits are provided, sports provide mostly intangible benefits, and for this reason, it is more difficult to satisfy customers (Aaker, 1991). It is critical to promote customer loyalty while maintaining brand equity, because it provides protection against aggressive competitors that could undermine brand equity, and it allows a predictable level of projected sales (Grossman, 1994; Shocker, Srivastava, & Ruekert, 1994). The impact of loyalty should not be underestimated, because it is a critical part of being profitable, as a loyal customer base provides a profit stream (Boone, Kochunny, & Wilkins, 1995).

A commitment to athletics by university presidents and members of boards of trustees is essential in the development of brand equity. The support of athletics by the leaders of the institution assists in the approval of capital projects (e.g., new facility development), the hiring of top coaches and athletic administrators, and the authorization of fund-raising efforts that enhance or augment the overall development

campaigns of the university. The ethical management of athletics is important, because a positively managed athletic department can enhance the local and national profile of the university. The presidents, as well as the athletic directors, need to understand their role in the creation of brand equity for the institution. They must work collaboratively to elevate the academic and ethical standards with the public platform sports provides to the institution (Glenn & Cobb, 1994).

The Impact of Institutional Type on Financial Trends

It is not only important to have a clearly defined system for managing the fiscal affairs of an organization, but it is important to understand the many factors that promote or deter the generation of revenue in an organization. The concept of understanding revenue generation is equally if not more important to institutions of higher education sponsoring NCAA Division I university athletic departments (Chabotar, 1999).

A study was conducted by McEvoy, Morse and Shapiro (2013) of all NCAA Division I institutions. The data were collected through a database published in *USA Today* which obtained the information from a public records request. The information does not include private institutions, as they are not required to respond and have been excluded from this study for that reason (McEvoy et al., 2013).

All the public FBS programs were examined as separate subjects from the years of 2002–2003 to 2006–2007. A multiple regression model was utilized to predict department-generated revenues and examine factors within the model. A fixed-effects ordinary least squares (OLS) multiple regression equation was developed to examine empirical department-generated revenues at each intercollegiate athletic program

included in the study. A significance level of .05 was established a priori in the analysis of the regression model and related variable correlations (McEvoy et al., 2013).

The study found that membership in a BCS conference (six conferences that received an automatic bid into a post season bowl game) was the one factor that was most important in the determination of department-generated revenues. The formula of using beta weights for the study calculated that membership in the BCS was worth more than \$21 million dollars annually. The enrollment of the university was also one of the strongest predictors of revenue generation in the regression model. The regression results further revealed that population in the county and per capita income were not relevant in predicting athletic department-generated revenues within the model (McEvoy et al., 2013).

The most important factor to consider is the model of a not-for-profit intercollegiate athletic department and how it differs from a traditional for-profit business. Athletic departments for this reason are not geared solely toward creating a profit, in company with other not-for-profits (Hansmann, 1980).

The best manner in which to understand this concept is through the evaluation of Bowen's Revenue Theory of Cost (1980). The "revenue theory of cost" as developed by Bowen explains the organizational behavior of colleges and universities. Bowen emphasizes in quest of excellence, prestige and influence colleges raise all the money they can and spend all the money they raise. The theory, also known as "Bowen's Law" and/or "Bowen's Rule", expresses how the cost of education is determined by revenue available and the costs incurred by an institution are relative to the size of enrollment. The rule or law also conveys that institutional spending on education is only indirectly

impacted by considerations of need, efficiency, market wages/prices and technology (Bowen, 1980).

The concept expressed by Bowen for higher education also applies to intercollegiate athletics. The intercollegiate athletic model displays the same priorities as the institution regarding the pursuit of excellence, prestige and influence. The desire to have a strong athletic program has become more important as athletics often are referred to as the *front porch* of the institution, since athletics represent the most visible aspect of the institution to individuals outside the academic community. Institutions are often compelled to allocate considerable amounts of resources to intercollegiate athletics because it provides an opportunity for an external audience to feel connected to the institution, and athletics provides a plausible rationale for supporting the institution. It is this factor that contributes to the competitive spirit of institutions and why state of the art facilities are constantly being built. The arms race, which is associated with facilities and compensation in athletics, compares favorably to the academic pursuits of the institution, as it becomes more entrepreneurial and commercialized due to heightened competition for the top achievers in their respective fields (Toma, 2010).

The intense competition between the larger institutions in the FBS has created an environment that warrants review to determine if the FBS classification adequately represents all members equally. The research reviewed 100 institutions and about one-third of those institutions subsidized athletics at less than 10% of operating revenue. Almost no subsidy was received at seven of the leading institutions, and 15 programs received less than \$3 million dollars. The data describe the disparity in financial resources among institutional members of the FBS. The FBS has institutions with

budgets of less than \$10 million dollars, such as Louisiana-Monroe, and institutions such as Texas with budgets that exceed \$100 million dollars. The FBS classification treats all the institutions without distinction, because all are members of the highest ranking division in the sport of football (Toma, 2010).

The success, appearance of facilities, and public visibility, as well as the perception of the intercollegiate athletics program provide a platform that would not exist by virtue of academic excellence alone. Therefore it is important for intercollegiate athletics and institutions of higher education to work interdependently in order to utilize the visibility intercollegiate athletics can bring to an institution for the purpose of advancing educational initiatives (Toma, 1999).

The Assessment of Financial Trends to Maximize Revenue

Financial accounting is a tool utilized by all organizations to assess the manner in which funds are being generated and spent, and this process is equally as important for institutions of higher education, as well as departments of intercollegiate athletics. It is important to find a common process to account for financial transactions, so the information is beneficial in the strategic management of an organization (Johnson & Kaplan, 1987; Shank & Govindarajan). The common process will provide peer institutions with a valuable way to assess the financial health of their institution (including the department of intercollegiate athletics) and clearly define strategic priorities (Porter, 1985).

A study conducted by Adams, Robichaux, and Guarino (2010) focused on the status of managerial accounting practices by surveying a random sample of chief financial officers (CFOs) in public four-year colleges and universities with those in

private four-year colleges and universities during two specifically designated points in time (1998–1999 and 2003–2004). The study was designed to review the perceived rate of adoption of managerial accounting practices between CFOs representing public institutions and CFOs representing private institutions during the two aforementioned points in time of the study (Adams, et al., 2010). The study involved a 2 X 2 between subjects multivariate analysis of variance (MANOVA) and was performed on six dependent variables which included budgeting, costing and outsourcing. The independent variables were institutional control (private or public) and time (1998–1999 and 2003–2004) (Adams, et al., 2010).

The results of the MANOVA indicated a significant interaction effect of institutional control and time. The assessment of simple main effect between control (public or private) during the 1998–1999 and 2003–2004 time period was conducted by utilizing independent sample t-tests (Adams, et al., 2010).

During the years of 1998–1999, CFOs at private institutions reported the adoption of managerial accounting principles at a rate significantly higher than CFOs representing public institutions in the domains of pricing and performance measurement. During the years of 2003–2004, CFOs representing public institutions reported adoption of managerial accounting practices at a rate significantly higher than CFOs representing private institutions in the domains of budgeting, performance measurement, organization behavior and outsourcing (Adams, et al., 2010).

The investigators examined which items among the domains of budgeting, performance measurement, organization behavior, and outsourcing displayed a significant difference between public and private institutions. The CFOs representing

public institutions reported adoption of managerial accounting practices at a rate significantly higher than CFOs representing private institutions in these domains. The largest differences between public and private institutions in the adoption of budgeting practices were found in program budgeting and capital budgeting. The largest differences were observed in performance management in a breakeven analysis at the class level, profitability at the class level, benchmarking, and satisfaction with performance measurement. The largest difference between public and private institutions in organization behavior was noted in rewarding cost savings. Of the two questions on outsourcing, cost analysis showed the larger difference between public and private institutions (Adams, et al., 2010).

The research suggested that public institutions due to the difficult economic climate were focused on the necessity to implement a structured, uniform approach to the management of financial affairs. The management of fiscal affairs was also a focal topic due to decreased funding which required institutions to place more attention on the management of financial resources (Adams, et al., 2010).

It is not only important to have a clearly defined system for managing the fiscal affairs of an organization, but it is important to understand the many factors that promote or deter the generation of finances in an organization. The concept of understanding revenue generation is important to institutions of higher education sponsoring NCAA Division I university athletic departments in order to maximize revenue (Chabotar, 1999).

The Financial Perspective of Intercollegiate Athletics and Higher Education

The debate on the financial value of intercollegiate athletics to an institution of higher education is impacted by whether you view athletics as an auxiliary unit such as a residence hall, or whether you view it as an academic unit. Intercollegiate athletics is most often perceived as an auxiliary unit with no academic value, so conflict arises with faculty and staff on campus when a perception exists that funds or resources are allocated away from academic units towards athletics or any auxiliary unit. The perception of athletics as an auxiliary unit and not a part of the academic mission of the institution is part of what is known as the Standard View of athletics, because according to the Standard View, intercollegiate athletics is not considered a component of higher education (Brand, 2006).

The university and intercollegiate athletics could both benefit if the Standard View were altered to integrate intercollegiate athletics into the mission of the institution. The inclusion of intercollegiate athletics as part of the educational mission would result in what is referred to as an Integrated View. The Integrated View values the pursuit of mental and physical accomplishment in a manner similar to Plato, because both can be seen as necessary in order to attain success as a citizen (Brand, 2006). The Integrated View would acknowledge intercollegiate athletics in a manner similar to a music student, who while not exclusively involved in an academic exercise, nonetheless values learning, achievement of goals, and life perspective which create an opportunity for experiential learning that is invaluable in the development of young men and women. The perspective that intercollegiate athletics is a co-curricular and not an extracurricular activity conveys an integration of sport into the academic experience of all students'

Integrated View of intercollegiate athletics as a benefit to the mission of the institution emphasizes that intercollegiate athletics is not an impediment to the academic mission of the university (Brand, 2006).

A study was conducted by Pincin and Hoffer (2013) utilizing data from 227 public colleges and universities to investigate the behavior of NCAA Division I athletic departments over the period of 2006–2011. The study focused on the intercollegiate athletic model because it differs from the traditional for-profit business enterprise. A traditional business enterprise is profit-seeking, but due to concerns of amateurism, protection of academic integrity, and revenue generation, intercollegiate athletics departments work to protect the integrity of the student-athlete experience without the influence of a traditional for profit business solely focused on generating money (Pincin & Hoffer, 2013).

The median athletic department revenue grew \$4.14 million, a 27.82 percent increase between the years of 2006–2011. The revenue data are divided among six categories: ticket sales, student fees, school funds (direct and indirect financial support from the college or university towards athletic programs), contributions (financial contributions beyond ticket sales), rights and licensing (media rights, sponsorships, licensing, advertisements, trademarks and royalties), and other revenue (any additional revenue from tournaments or bowl game appearances) (Pincin & Hoffer, 2013).

The study utilizes the Least Squares Dummy Variable (LSDV) estimations. The models were tested under four conditions: with all colleges included (all eleven conferences in the NCAA Division I), with only Bowl Championship Series (BCS) now referred to as FBS conferences, with only non-BCS now referred to as non-FBS

conferences, and with only Automatic Qualifying (AQ) (an AQ conference is an athletic conference whose league champion receives an automatic berth into a bowl game) conferences included in the study (Pincin & Hoffer, 2013).

Ticket sales are the most important revenue stream in the increase of total expenditures, specifically for institutions in the BCS, now FBS. An increase in revenue of one dollar for ticket sales reduces the subsidy athletic departments receive from an institution by as much as \$0.19 for each added dollar of revenue earned from ticket sales. The change of conference affiliation can increase total revenue for institutions in the BCS, now FBS as well. The revenue earned from intercollegiate athletics can be substantial and the manner in which institutions support their athletic programs will continue to be an important issue (Pincin & Hoffer, 2013).

CHAPTER 3. RESEARCH METHODOLOGY

Introduction

The study was conducted to analyze the revenue generation that occurs in both intercollegiate athletics and institutions of higher education. The study involved the selection of specific areas in both intercollegiate athletics and higher education that have revenue earning potential. The specific variables were selected because the function of the specific revenue generating stream utilized for the study are similar in function to both intercollegiate athletics and institutions of higher education. The research design involves a longitudinal analysis of data which will be compared for each year represented in the study to determine how they compare. The study analyzed FBS institutions for the purpose of comparing financial trends in intercollegiate athletics and institutions of higher education. This chapter will review the research design, participants included in the study, data collection process and the analysis of the data collected.

The purpose of this study was to compare the financial trends that occur in intercollegiate athletics with the financial trends at an institution of higher education. The research was conducted by analyzing all public institutions from the Football Bowl Subdivision (FBS) in order to compare how revenue is generated at each of the institutions. The analysis was conducted for a seven year period from 2006–2012, and the data were reviewed for the purpose of conducting a comparative analysis of

similarly situated variables. A comparison was conducted of four variables in intercollegiate athletics, and those variables were compared with four similar variables from the institution. The variables were selected based on the commonalities that exist between the pair of categories in intercollegiate athletics and the institutions of higher education. The variables were selected for the purpose of reviewing the financial management that occurs in intercollegiate athletics and how it compares to financial management that occurs at the institution.

Research Questions

The study was conducted to examine the following research questions:

1. How do the trends in ticket sales (athletics) and tuition (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?
2. How do the trends in media rights and licensing (athletics) and grants and contracts (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?
3. How do the trends in contributions (athletics) and gifts (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?
4. How do subsidies (athletics) and state appropriations (institution) compare for members of the five power conferences and the balance of the FBS during the two most recent years of the study?

Hypotheses to Research Questions

1. Research Question 1 and Hypotheses: The trends between ticket sales (athletics) and tuition (institution) is hypothesized to show an upward trend.

2. Research Question 2 and Hypotheses: The trend in media rights and licensing (athletics) and grants and contracts (institution) is hypothesized to show an increase, with media rights and licensing trending upward at a higher rate.

3. Research Question 3 and Hypotheses: The trend in contributions (athletics) and gifts (institution) is hypothesized to trend upward at a comparable rate.

4. Research Question 4 and Hypotheses: The trend in subsidies (athletics) and state appropriations (institution) is hypothesized to show a decrease, with subsidies trending downward more gradually, while state appropriations would display a more drastic decline.

Methods

Research Design

The purpose of this study was to examine the differences in financial trends that exist between intercollegiate athletics and institutions of higher education. The study assessed how variables in intercollegiate athletics compare with similarly situated variables at the institution of higher education. The variables identified for comparison were selected on the basis of commonalities that exist between intercollegiate athletics and higher education.

The study specifically focused on all the public institutions of the Football Bowl Subdivision (FBS), and an analysis of the data over a seven year period was conducted during fiscal years 2006–2012. The institutions utilized for the purpose of this study

were members of the FBS and made public complete data sets for both intercollegiate athletics and the institutions of higher education during the seven year period identified in the study (2006–2012). The institutions with incomplete data available, as well as institutions with data which could skew materially the distribution were excluded from the study. The study excluded two institutions in the population due to the absence of intercollegiate athletics data from one institution and a substantial gift that was provided to the other institution that skewed the data. The exclusion of other institutions occurred if they failed to offer complete data for the period described in the research.

The study identified four specific areas in intercollegiate athletics and four specific areas at the institution of higher education that are similarly situated for the purpose of comparing the management of finances. The areas compared for the purpose of this research were ticket sales (athletics) and tuition (institution), media rights and licensing (athletics) and grants and contracts (institution), contributions (athletics) and gifts (institution), and subsidies (athletics) and state appropriations (institution).

The study will be conducted with the null hypothesis that a nominal degree of variance, if any, will be observed between financial trends that occur in intercollegiate athletics and the financial trends that occur at an institution of higher education. The independent variable identified for the purpose of this research is time (year) and the source of revenue (intercollegiate athletics or institution of higher education). The dependent variable has been identified as the amount of revenue earned during a given year.

Sample Population/Participants

The participants in this research included a population of 86 public institutions from the FBS. The institutions included in this study were all four-year public institutions with complete data from intercollegiate athletics and the institution of higher education for a seven year period. The institutions represented were comprised mostly of the larger public universities and also represented multiple NCAA conference affiliations. The institutions that are members of the FBS are, generally speaking, the higher enrollment and highest revenue generating of the four year institutions in higher education. The sample included institutions representing over 40 states that were located in both larger and smaller cities in the United States. A list of the specific institutions utilized for the purpose of conducting this research can be obtained by reviewing Appendix 1. The population included in this research was comprised of the FBS institutions with seven years of publicly available data that could be acquired via the web.

The institutions excluded from the study were Oklahoma State University as a result of a large donation that skewed the athletic data, and Penn State University that did not have a complete data set from the institution or athletics. The University of Pittsburgh and Temple University were excluded because the athletic data was not included in the publicized report of athletic data utilized for the research. The Army, Air Force, as well as the Navy were excluded from the study because they do not receive traditional funding for support of their athletic programs and do not compare with the other institutions included in the study. The University of Troy could not provide the seven years of financial statements within the time frame of the study. A request for

information was submitted to San Jose State University via the web that required a minimum time frame to respond, which exceeded the time frame established by the researcher to collect data. The University of Wisconsin and Louisiana Tech University only had state system information available. Colorado State University confirmed via e-mail that it does not produce stand alone financial statements for the university. The University of Iowa, University of Texas at El Paso, University at Buffalo, Northern Illinois University, and San Diego State University were contacted, but it was not possible to obtain complete data for each of the seven years represented in the study for these institutions.

The institutions were ranked based on total revenue generated by the intercollegiate athletic departments and the information appears in descending order from the most recent year included in the study. The FBS institutions included were those that had publicly available data, with a data set that was complete for the entire seven year period of the study.

Data Collection

The study involved a longitudinal study of publically available data obtained from the NCAA Dashboard Indicators as well as information obtained from audited financial statements of the institutions of higher education. The data focused on a seven year time frame which included the years of 2006–2012. The specific information on athletics is contained within an internet website that can be accessed by any computer with internet access. The website can be accessed at <http://www.usatoday.com/sports/college/schools/finances/>. The data were gathered via reports submitted by each institution with criteria identified by the NCAA. The source of institutional data was the

audited financial statements. The statements were reviewed for each of the FBS institutions selected for each of the seven years represented in this research. The data were gathered from the FBS institutions and listed in descending order based on total revenue earned by the department of intercollegiate athletics during 2012. The institutional data were entered into an Excel spreadsheet for each of the seven years reflected in the study. The institutional data were reviewed each year and compared with the financial data reported by the department of intercollegiate athletics from the same institution. The purpose of the comparison between intercollegiate athletics and the institutions of higher education is to allow an analysis of the yearly trends that occur independently and collectively with both of the variables.

Data Analysis

The research design involved an analysis of multiple years of data. The data were compared over a seven year time frame and compared a designated variable from intercollegiate athletics with a comparable designated variable from the institution of higher education. The data were analyzed by utilizing a two factor within-subjects ANOVA. The two factors are the sources of the data analyzed, which are the intercollegiate athletics data and the data from the institutions of higher education. The second of the two factors that were implemented in the research design involves time which is represented by the seven year period from 2006–2012. The study was conducted by utilizing the data obtained from intercollegiate athletics as well as the data obtained from the institutions of higher education for a data analysis of a seven year period (2006–2012). The study was conducted by utilizing a within subjects ANOVA to compare all of the public institutions categorized as FBS by the NCAA. The analysis of

the data in this study utilized .05 as the p or Alpha value. The analysis allowed the data to be analyzed over a seven year time frame in order to examine the differences (trends) over time for both the data that are obtained from intercollegiate athletics and the data obtained from the institutions of higher education. The analysis of the data will provide an opportunity to determine whether the trends are similar or how they vary during each of the seven years of the study. The interaction would indicate that the trend is different over time when comparing the two sources of revenue – intercollegiate athletics and institution of higher education.

Table 1 provides a review of the research questions, variables being compared for the purpose of the research and the type of analysis utilized in reviewing the statistical data.

Table 1

Research Design and Analysis

Research Question	Institutional Variable(s)	Athletic Variable(s)	Analysis
1. How do the trends in ticket sales (athletics) and tuition (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?	Tuition – Data recorded for each year represented in the study is derived from total income earned after reviewing the Statement of Revenues, Expenses and Changes in Net Assets for each year represented in the study. The dollar amounts will be reviewed to compare the rate of increase and/or decrease between the institutional and athletic variables during 2006–2012.	Ticket sales – Data recorded for each year represented in the study is derived from the revenue earned from the sale of tickets in all sports during each year represented in the study. The dollar amounts will be reviewed to compare the rate of increase and/or decrease between the institutional and athletic variables during 2006–2012.	(2) X (7) ANOVA

Research Question	Institutional Variable(s)	Athletic Variable(s)	Analysis
2. How do the trends in media rights and licensing (athletics) and grants and contracts (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?	Grants and Contracts – Data recorded for each year represented in the study is derived from total income earned from grants and contracts after reviewing the Statement of Revenues, Expenses and Changes in Net Assets for each year represented in the study. The dollar amounts will be reviewed to compare the rate of increase and/or decrease between the institutional and athletic variables during 2006–2012.	Media Rights and Licensing – Data recorded for each year represented in the study is derived from revenue earned from media rights and licensing agreements during each year represented in the study. The dollar amounts will be reviewed to compare the rate of increase and/or decrease between the institutional and athletic variables during 2006–2012.	(2) X (7) ANOVA
3. How do the trends in contributions (athletics) and gifts (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?	Gifts – Data recorded for each year represented in the study is derived from total income earned from gifts after reviewing the Statement of Revenues, Expenses and Changes in Net Assets for each year represented in the study. The dollar amounts will be reviewed to compare the rate of increase and/or decrease between the institutional and athletic variables during 2006–2012.	Contributions – Data recorded for each year represented in the study is derived from revenue earned from contributions during each year represented in the study. The dollar amounts will be reviewed to compare the rate of increase and/or decrease between the institutional and athletic variables during 2006–2012.	(2) X (7) ANOVA
4. How do subsidies (athletics) and state appropriations (institution) compare for members of the five power conferences and the balance of the FBS during the two most recent years of the study?	State Appropriations – Data recorded for each year represented in the study is derived from total income earned from state appropriations after reviewing the Statement of Revenues, Expenses and Changes in Net Assets for each year represented in the study. The dollar amounts will be reviewed to compare the rate of increase and/or decrease between the institutional and athletic variables during 2006–2012.	Subsidies – Data recorded for each year represented in the study is derived from revenue earned from subsidies during each year represented in the study. The dollar amounts will be reviewed to compare the rate of increase and/or decrease between the institutional and athletic variables during 2006–2012.	(2) X (2) ANOVA

The first question that was researched involved analyzing the trends in ticket sales (athletics) and tuition (institution) over a seven year period in order to determine

how they compare. The second question that was researched involved analyzing the trends in media rights and licensing (athletics) and grants and contracts (tuition) in a seven year period in order to determine how they compare. The third question that was researched involved analyzing the trends in contributions (athletics) and gifts (institution) in a seven year period in order to determine how they compare. The fourth question that was researched involved analyzing how subsidies (athletics) and state appropriations (institution) compare for the most recent two years of data available.

The data analysis occurred by utilizing a within subjects ANOVA for the purpose of determining whether the outcomes differ by source. The within subjects ANOVA was utilized for the comparison of subsidies (intercollegiate athletics) and state appropriations (institution of higher education) for the most previous two years of available data.

Summary

The purpose of this study is to examine how the financial trends occur in intercollegiate athletics and how those trends mirror the financial trends that occur in higher education. The focus of the research centers on how the eight similarly situated variables selected for the study compare. The variables were placed into two separate categories and the categories for the variables were designated as intercollegiate athletics and the institution of higher education. The variables were selected on the basis of similarity. The data gathered were analyzed over a period of seven years for intercollegiate athletics and the institution of higher education. The analysis involved a comparison of the financial trends in intercollegiate athletics and in the institution of

higher education to determine whether the financial trends are similar, as well as how they vary.

CHAPTER 4. FINDINGS

Introduction

The purpose of this study was to compare the financial trends in intercollegiate athletics with the financial trends in institutions of higher education. The research was conducted by analyzing the public institutions in the National Collegiate Athletic Association (NCAA), specifically those institutions in the Football Bowl Subdivision (FBS) in order to evaluate and compare how revenue is generated at each of the public institutions. The analysis was conducted for a seven year period during the years of 2006–2012, and the data were reviewed for the purpose of conducting a comparative analysis of similarly situated variables in intercollegiate athletics and institutions of higher education. The study involved the comparison of four variables that were similar in both intercollegiate athletics and higher education. The research also focused on an analysis of the institutions within the five power conferences (ACC, Big Ten, Big 12, PAC 12, SEC) by comparing them with the remaining conferences and member institutions within the FBS.

Research Questions

The study was conducted to examine the following research questions:

1. How do the trends in ticket sales (athletics) and tuition (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?

2. How do the trends in media rights and licensing (athletics) and grants and contracts (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?

3. How do the trends in contributions (athletics) and gifts (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?

4. How do subsidies (athletics) and state appropriations (institution) compare for members of the five power conferences and the balance of the FBS during the two most recent years of the study?

Sample Population

The participants in this research included a population of 86 public institutions from the FBS. The institutions included in this study were all four-year public institutions with complete data from intercollegiate athletics and the institution of higher education for a seven year period. The institutions represented were comprised mostly of the larger public universities and also represented multiple NCAA conference affiliations. The institutions that are members of the FBS are, generally speaking, the higher enrollment and highest revenue generating of the four year institutions in higher education. The institutions represented for the purpose of conducting this specific study can be found in Appendix 1.

The composition of institutions included in this study are represented of FBS institutions that reported seven consecutive years of athletic financial statements and also presented seven years of statements of revenues, expenses and changes in net assets during the years of 2006–2012.

The institutions included in the study share common characteristics of being public and members of the FBS. The institutions were not selected based on membership of conference affiliation, notoriety, geographical location or student population. The institutions chosen for the study were selected based on eligibility to participate in one of the post-season football bowl games. The 86 institutions observed for the purpose of comparison are also categorized as Power 5 or Non-Power 5. The institutions designated as Power 5 are a result of the newly changing structure of the NCAA, which has designated specific conferences and their members to experience a higher level of autonomy to institutions in order to provide more permissible benefits to student-athletes in this Power 5 group. The institutions designated as Power 5 members have to abide by the requirements of the NCAA. The Non-Power 5 member conferences and institutions will not be forced to provide the same benefits to student-athletes as required for institutions in the Power 5, but will have the discretion to provide none, some or all of the benefits to student-athletes at their respective conferences and institutions.

The Power 5 for the purpose of this study will consist of 48 institutions and the Non-Power 5 for the purpose of this study will consist of 38 institutions.

Data Sources

The research design involved an analysis of multiple years of data. The data were compared over a seven year time frame and compared a designated variable from intercollegiate athletics with a comparable designated variable from the institution of higher education. The data were analyzed by utilizing a two factor within subjects ANOVA. The two factors are the sources of the data that were analyzed, which are the

intercollegiate athletics data and the data from the institutions of higher education. The second of the two factors that were implemented in the research design involves time, which is represented by the seven year period from 2006–2012. The study was conducted by utilizing the data obtained from intercollegiate athletics, as well as the data obtained from the institutions of higher education, for the purpose of comparing trends in revenue earned over time. The study was conducted by utilizing a two factor within subjects ANOVA with repeated measures to compare all of the public institutions categorized as FBS by the NCAA. The data were analyzed over a seven year time frame in order to examine the differences (trends) over time for both the data obtained from intercollegiate athletics and the data obtained from the institutions of higher education. The analysis of the data provided an opportunity to determine whether the trends are similar or how they vary during each of the seven years of the study. The interaction indicates that the trend is different over time when comparing the two sources of revenue – intercollegiate athletics and institutions of higher education.

The specific design involved an analysis of eight variables for comparison at the institutions of higher education and intercollegiate athletics. The 86 institutions were compared relative to their standing within the FBS, and the institutions were categorized as either a member of the Power 5 or the Non-Power 5. The 86 institutions included for the purpose of this study consisted of 48 institutions in the Power 5, and the Non-Power 5 for the purpose of this study consisted of 38 institutions.

Descriptive statistics were observed in relation to the independent variables of Year and Affiliation, for the purpose of this study. The dependent variable is represented by the amount of revenue earned in a given year. The independent

variables of Ticket Sales and Tuition, Media Rights and Licensing and Grants and Contracts, as well as Contributions and Gifts, represent the data which were reviewed over the seven year time frame. The final analysis of this study involved the observation of the independent variables of Year and Affiliation. The dependent variable is represented by the amount of revenue earned in a given year. The independent variables of Subsidies and State Appropriations represent the source of data which were included in the study, but were only reviewed for a two year time frame.

The data representing the source, which includes the eight independent variables, represents all dollar figures included in the study by thousands. The data for all institutions represented in the study are presented with all dollar figures being expressed in the terms of thousands, because at many institutions the generated revenues are not in amounts to reach thresholds in the millions. The data being represented in this form allow simplicity in comparison of the information. The independent variable affiliation indicates the position of the institution by inclusion in either the Power 5 conference or the Non-Power 5 conference.

Data Analysis

A within-subjects ANOVA was performed with repeated measures to determine statistical significance for the variables being compared in the study for research questions one through four. The research design specifically for research questions one through three involved a 2 x 7 ANOVA design, and a 2 x 2 ANOVA design was implemented for research question number four.

The study was conducted over a seven year period, and data in the form of dollar figures for ticket sales as well as tuition were provided for each year represented in the study. The dollar figures were converted to thousands for the purpose of reporting the data in a consistent manner. The data reported in dollars are categorized by affiliation, source and year in which data were reported for the study. The affiliation is indicative of the alignment of the university as a member of the Power 5 or the Non-Power 5 conferences. The source for the purpose of the research indicates if the dollar figure appearing in the data is derived from ticket sales or tuition, and the report also identifies the affiliation of the institution as a Power 5 or non-Power 5 institutions.

Results

Research Question One – Tuition and Ticket Sales

A summary of revenue generated from both ticket sales and tuition for institutions considered members of the Power 5 and non-Power 5 conferences appear in Table 2. The table represents the revenue generated by ticket sales and tuition for the 48 institutions in the Power 5 conferences and the revenue generated by each of the 38 institutions included in the non-Power 5 conferences from 2006–2012.

Table 2

*Power 5 and Non-Power 5 – Revenue from Ticket Sales and Tuition**(Figures Below Represented in Thousands)*

	2006	2007	2008	2009	2010	2011	2012
Power 5							
Ticket Sales	\$ 19,496.46	\$ 17,811.75	\$ 19,480.40	\$ 20,163.44	\$ 20,708.35	\$ 21,447.90	\$ 22,038.94
Tuition	247,266.63	267,117.40	288,659.63	314,078.85	339,030.10	372,868.67	391,572.08
Non-Power 5							
Ticket Sales	2,594.47	2,839.21	3,172.13	3,056.42	3,208.47	3,334.26	3,460.16
Tuition	106,116.40	114,247.34	120,602.24	130,905.74	140,823.16	150,938.29	167,539.29

The revenue from ticket sales for Power 5 institutions trended upward with the exception of 2006–2007 when there was a decrease in revenue from ticket sales. The tuition revenue for institutions in the Power 5 increased for all seven years represented in the study.

The revenue from ticket sales in the non-Power 5 conferences trended upward with the exception of 2008–2009 when a decrease in revenue occurred with ticket sales. The revenue for tuition trended upward in the non-Power 5 conferences in each of the seven years represented in the study.

A summary of the within-subjects effects generated for both ticket sales and tuition for institutions considered to be members of the Power 5 and non-Power 5 conferences appears in Table 3. The table displays the source ($F_{1,84} = 186.844$, $p < .001$, effect size = .690), year represented with a ($F_{1,84} = 59.402$, $p < .001$, effect size = .414), source by year, ($F_{1,84} = 56.819$, $p < .001$, effect size = .403) and source by year by affiliation represented by ($F_{1,84} = 10.334$, $p < .001$, effect size = .110).

Table 3

Power Summary of Within-Subjects Effects — Financial Trends in Tuition and Ticket Sales

Variable	df	MS	F	P	Effect Size
Source (A)	1.000	1.353E+13	186.844	<.001	.690
Source X Affiliation	1.000	2.074E+12	28.626	<.001	.254
Error	84.000	7.244E+10			
Year (B)	1.746	2.149E+11	59.402	<.001	.414
Year X Affiliation	1.746	4.066E+10	11.238	<.001	.118
Error	146.629	3618033513			
Source X Year (AB)	1.690	2.046E+11	56.819	<.001	.403
Source X Year X Affiliation	1.690	3.722E+10	10.334	<.001	.110
Error	141.935	3601297129			
Summary of Between Subjects Effects					
Affiliation	1	3.007E+12	222.932	<.001	.324
Error	84	7.466E+10			

The three-way interaction that occurred (source X year X affiliation) resulted in the two-way interaction between source and year to be examined separately for Power 5 and non-Power 5 institutions. The summary of between subjects effects appears in Table 3 which displays ($F_{1,84} = 222.932$, $p < .001$, effect size = .324).

The Greenhouse-Geiser Correction was utilized to adjust for the violation of sphericity, because when the F value is not statistically significant with the standard degrees of freedom, there is no need to implement a correction because the data become less statistically significant.

An analysis was conducted at the simple effects level to verify the nature of the source X year interaction effects found for Power 5 and non-Power 5 institutions. The specific analysis involved four within-subjects ANOVAs which were used to examine the financial trends for ticket sales and tuition for Power 5 and non-Power 5 institutions. The results of this analysis are represented in Table 4 ($F_{1,84} = 6.509$ and $p = .001$). A post-hoc test was performed with multiple comparisons being reviewed for each statistically significant trend. The review of the data resulted in a statistically significant increase being observed for each of the seven years represented in the study. The tuition increase for the institutions represented in the non-Power 5 ($F_{1,84} = 44.609$ and $p < .001$) and Power 5 ($F_{1,84} = 42.433$ and $p = .001$) was statistically significant, except for the years of 2009 through 2010 for the non-Power 5 institutions and except for the years of 2011 through 2012 for institutions in the Power 5.

Table 4

Simple Effects Follow-Up Analysis of Ticket Sales and Tuition

Source	df	F	P
Ticket Sales			
Power 5	1.086	.849	.370
Non-Power 5	2.316	6.509	.001
Tuition			
Power 5	1.572	42.433	<.001
Non-Power 5	1.652	44.609	<.001

A statistically significant increase was observed in ticket sales for the non-Power 5 institutions, but a statistically significant increase was not observed for the institutions within the Power 5. The tuition increase was statistically significant in each year of the seven years for both the non-Power 5 and Power 5 institutions, with each having one of the seven years observed in the study not determined to be statistically significant.

Research Question Two – Media Rights and Licensing and Grants and Contracts

A summary of the revenue generated for both media rights and licensing and grants and contracts for institutions considered members of the Power 5 and non-Power 5 conferences appears in Table 5. The table represents the revenue generated from media rights and licensing and grants and contracts by each of the 48 institutions represented in the Power 5 conferences and the revenue generated by each of the 38 institutions included in the non-Power 5 conferences from 2006–2012.

Table 5

Power 5 and Non-Power 5 — Revenue from Media Rights and Licensing and Grants and Contracts

(Figures Below Represented in Thousands)

	2006	2007	2008	2009	2010	2011	2012
Power 5							
Media Rights and Licensing	\$ 16,336.33	\$ 17,782.44	\$ 20,225.31	\$ 22,178.02	\$ 24,383.29	\$ 26,242.81	\$ 29,140.04
Grants and Contracts	313,302.60	322,107.48	329,760.06	336,434.50	363,108.06	389,955.19	392,598.48
Non-Power 5							
Media Rights and Licensing	3,265.50	3,698.11	4,237.79	4,683.92	5,035.13	5,229.61	5,289.26
Grants and Contracts	94,201.13	95,954.97	92,633.92	93,774.66	101,510.90	105,074.26	98,290.55

A summary of the within-subjects effects generated for both media rights and licensing and grants and contracts among members of the Power 5 and non-Power 5 conferences appears in Table 6. The table represents the revenue generated in each of the respective categories for each of the seven years included in the study.

Table 6

Summary of Within-Subjects Effects — Financial Trends in Media Rights and Licensing and Grants and Contracts

Variable	df	MS	F	P	Effect Size
Source (A)	1.000	1.309E+13	84.275	<.001	.501
Source X Affiliation	1.000	4.073E+12	26.220	<.001	.238
Error	84.000	1.554E+11			
Year (B)	1.412	7.569E+10	29.136	<.001	.258
Year X Affiliation	1.412	4.762E+10	18.330	<.001	.179
Error	118.575	2597925403			
Source X Year (AB)	1.415	4.293E+10	16.536	<.001	.164
Source X Year X Affiliation	1.415	2.810E+10	10.822	<.001	.114
Error	118.870	2596080922			
Summary of Between Subjects Effects					
Affiliation	1	5.411E+12	33.534	<.001	.285
Error	84	1.614E+11			

The table displays the source ($F_{1,84} = 84.275$, $p < .001$, effect size = .690), source X affiliation ($F_{1,84} = 26.220$, $p < .001$, effect size = .238), year ($F_{1,84} = 29.136$, $p < .001$, effect size = .258), year X affiliation ($F_{1,84} = 18.330$, $p < .001$, effect size = .179), source by year ($F_{1,84} = 16.536$, $p < .001$, effect size = .164) and source by year by affiliation, ($F_{1,84} = 10.822$, $p < .001$, effect size = .114). The summary of between subjects effects appears in Table 6 ($F_{1,84} = 33.534$, $p < .001$, effect size = .285).

The revenue generated from media rights and licensing for Power 5 institutions trended upward for each of the seven years represented in the study and revenue from

grants and contracts also showed an upward trend for each of the seven years represented in the study.

The revenue generated from media rights and licensing for non-Power 5 institutions trended upward for each of the seven years represented in the study and revenue generated from grants and contracts for non-Power 5 institutions trended upward except from 2007–2008 and 2011–2012. The revenues during 2007–2008 dropped below the amount of the first year observed in the study. The year of 2009 resulted in an increase from 2008, but was still below the revenue generated in the initial year of the study. The revenue earned in 2011–2012 dropped, but revenue earned in the final year observed surpassed earnings in all other years with the exception of 2010 and 2011.

An analysis was conducted between media rights and licensing and grants and contracts revenue generated by the Power 5 and non-Power 5 institutions in Table 7. The media rights and licensing for the Power 5 institutions ($F_{1,84} = 73.369$ and $p = .001$) resulted in a statistically significant increase for each of the seven years represented in the study. The media rights and licensing for the non-Power 5 institutions ($F_{1,84} = 14.924$ and $p < .001$) resulted in a statistically significant increase for each of the seven years represented in the study. The grants and contracts revenue resulted in a statistically significant increase for the institutions represented in the Power 5 ($F_{1,84} = 25.812$ and $p < .001$). The grants and contract revenue for the non-Power 5 institutions ($F_{1,84} = 2.549$ and $p = .094$) was not statistically significant.

Table 7

Simple Effects Follow-Up Analysis of Media Rights and Licensing and Grants and Contracts

Source	df	F	P
Media Rights and Licensing			
Power 5	3.035	73.369	<.001
Non-Power 5	1.797	14.924	<.001
Grants and Contracts			
Power 5	1.354	25.812	<.001
Non-Power 5	1.724	2.549	.094

Research Question Three – Contributions and Gifts

A summary of revenue generated for both contributions and gifts for institutions considered members of the Power 5 and non-Power 5 conferences appears in Table 8. The table represents the revenue generated by contributions and gifts from the 48 institutions in the Power 5 conferences and the revenue generated by each of the 38 institutions included in the non-Power 5 conferences from 2006–2012.

Table 8

*Power 5 and Non-Power 5 — Revenue from Contributions and Gifts**(Figures Represented in Thousands)*

	2006	2007	2008	2009	2010	2011	2012
Power 5							
Contributions	\$13,584.33	\$14,942.54	\$16,710.19	\$16,690.02	\$18,743.56	\$18,719.65	\$21,143.77
Gifts	47,868.88	56,376.33	58,547.31	59,723.06	58,937.15	65,084.35	68,675.00
Non-Power 5							
Contributions	2,806.32	2,686.32	3,149.95	2,931.34	2,928.76	3,424.24	3,446.05
Gifts	10,349.42	11,964.26	16,458.76	13,041.37	20,572.58	25,131.61	21,959.92

The revenue of contributions for Power 5 institutions trended upward with the exception of 2008–2009 and 2010–2011 when there was a nominal decrease during both time periods in revenue generated from contributions. The gift revenue for institutions in the Power 5 trended upward with the exception of 2008–2009 and 2011–2012 where a decrease in revenue occurred. The decrease in revenue between 2008 and 2009 showed a reduction of over 20 percent and the decrease between 2011 and 2012 was over 12 percent.

The revenue of contributions for non-Power 5 institutions trended downward from 2006–2007 and from 2008–2010 (revenue was down by a minimal amount from 2009–2010), but the overall trend was upward from the first year represented in the study. The gift revenue for institutions in the non-Power 5 trended upward except from 2008–2009 and in the last year from 2011 to 2012. The seven year trend in gifts was upward and resulted in an increase by over 2 times from the first year of the study to the last year.

A summary of the within-subjects effects generated for both media rights and licensing and grants and contracts among members of the Power 5 and non-Power 5 conferences appears in Table 9. The table represents the revenue generated in each of the respective categories for each of the seven years included in the study.

Table 9

Summary of Within-Subjects Effects — Financial Trends in Contributions and Gifts

Variable	df	MS	F	P	Effect Size
Source (A)	1.000	2.337E+11	55.370	<.001	.397
Source X Affiliation	1.000	5.854E+10	13.868	<.001	.142
Error	84.000	4221095928			
Year (B)	1.594	8207298875	9.429	<.001	.101
Year X Affiliation	1.594	1018411582	1.170	.305	.014
Error	133.891	870410539.4			
Source X Year (AB)	1.497	3453650626	3.960	.032	.045
Source X Year X Affiliation	1.497	603678408.2	.692	.463	.008
Error	125.776	872200285.2			
Summary of Between Subjects Effects					
Affiliation	1	2.362E+11	54.340	<.001	.393
Error	84	4347510068			

The table displays the source ($F_{1,84} = 55.370$, $p < .001$, effect size = .397), source X affiliation ($F_{1,84} = 13.868$, $p < .001$, effect size = .142), year ($F_{1,84} = 9.429$, $p < .001$, effect size = .101), year X affiliation ($F_{1,84} = 1.170$, $p = .305$, effect size = .014), source by year ($F_{1,84} = 3.960$, $p = .032$, effect size = .045) and source by year by

affiliation, ($F_{1,84} = .692$, $p = .463$, effect size = .008). The summary of between subjects effects appears in Table 9, which displays ($F_{1,84} = 54.340$, $p < .001$, effect size = .393).

A summary of the within-subjects effects of revenue generated for both contributions and gifts for institutions considered to be members of the Power 5 and non-power 5 conferences appears in Table 10. The contributions for the Power 5 institutions ($F_{1,84} = 11.340$ and $p < .001$) resulted in a statistically significant increase for the seven years represented in the study. The contributions for the non-Power 5 institutions ($F_{1,84} = 2.282$ and $p = .064$) resulted in a statistically significant increase for the seven years represented in the study. The gifts revenue resulted in a statistically significant increase for the institutions represented in the Power 5 ($F_{1,84} = 11.548$ and $p < .001$). The gifts revenue for the non-Power 5 institutions ($F_{1,84} = 1.594$ and $p = .215$) was not statistically significant.

Table 10

Simple Effects Follow-Up Analysis of Contributions and Gifts

Source	df	F	P
Contributions			
Power 5	3.041	11.340	<.001
Non-Power 5	3.979	2.282	.064
Gifts			
Power 5	4.021	11.548	<.001
Non-Power 5	1.093	1.594	.215

Research Question Four – Subsidies and State Appropriations

A summary of the percentage of revenue received from both subsidies and state appropriations for institutions considered members of the Power 5 and non-Power 5 conferences appears in Table 11. The table represents the percent of revenue received from subsidies and state appropriations for the 48 institutions in the Power 5 conferences and the 38 institutions included in the non-Power 5 conferences for the years of 2011 and 2012.

Table 11

Power 5 and Non-Power 5 — Revenue from Subsidies and State Appropriations

	2011	2012
Power 5		
Subsidies	8.8%	8.0%
State Appropriations	18.13%	17.44%
Non-Power 5		
Subsidies	54.25%	54.57%
State Appropriations	25.75%	25.30%

The percentage of revenue received from subsidies in 2011–2012 decreased slightly for the Power 5 conferences and the percentage of revenue received from state appropriations decreased slightly during those two years for the Power 5 conferences as well. The percentage of revenue received from subsidies in 2011–2012 slightly increased for the non-Power 5 conferences and the percentage of revenue received from state appropriations declined slightly during those two years.

A summary of the within-subjects effects of percentage of revenue received from both subsidies and state appropriations for institutions considered members of the Power 5 conferences appears in Table 12. The table represents the percentage of revenue received from subsidies and state appropriations for the years of 2011 and 2012.

Table 12

Summary of Within-Subjects Effects — Financial Trends in Subsidies and State Appropriations

Variable	df	MS	F	P	Effect Size
Source (A)	1.000	8080.263	29.170	<.001	.258
Source X Affiliation	1.000	31047.260	112.082	<.001	.572
Error	84	277.006			
Year (B)	1.000	13.175	2.320	.131	.027
Year X Affiliation	1.000	9.290	1.636	.204	.019
Error	84	5.678			
Source X Year (AB)	1.000	2.619	.409	.524	.005
Source X Year X Affiliation	1.000	3.782	.590	.444	.007
Error	84	6.406			
Summary of Between Subjects Effects					
Affiliation	1	61224.760	355.502	<.001	.809
Error	84	172.221			

The table displays the source ($F_{1,84} = 29.170$, $p < .001$, effect size = .258), source by affiliation ($F_{1,84} = 112.082$, $p < .001$, effect size = .572), year ($F_{1,84} = 2.320$, $p = .131$, effect size = .027), year by affiliation ($F_{1,84} = 1.636$, $p = .204$, effect size = .019), source by year ($F_{1,84} = .409$, $p = .524$, effect size = .005), source by year by affiliation, ($F_{1,84} = .590$, $p = .444$, effect size = .007).

The summary of between subjects effects in Table 12 represents ($F_{1,84} = 355.502$, $p < .001$, effect size = .809). The error has a value of $df = 84$, $MS = 172.221$.

A summary of the within-subjects effects analysis of percentage of revenue received from both subsidies and state appropriations considered to be members of the

Power 5 and non-Power 5 conferences appears in Table 13. The subsidies of the Power 5 institutions ($F_{1,84} = 3.452$ and $p = .069$) did not result in a statistically significant increase during the two years represented in the study. The subsidies for the non-Power 5 institutions ($F_{1,84} = .136$ and $p = .715$) did not result in a statistically significant increase during the two years represented in the study. The revenue derived from state appropriations for the institutions represented in the Power 5 declined significantly ($F_{1,84} = 7.973$ and $p = .007$). The revenue from state appropriations for the non-Power 5 institutions ($F_{1,84} = .660$ and $p = .422$) was not statistically significant.

Table 13

Simple Effects Follow-Up Analysis of Subsidies and State Appropriations

Source	df	F	P
Subsidies			
Power 5	1.00	3.452	.069
Non-Power 5	1.00	.136	.715
State Appropriations			
Power 5	1.00	7.973	.007
Non-Power 5	1.00	.660	.422

Summary

The financial trends observed during the seven years of the study (2006–2012) displayed similar increases in tuition for both the Power 5 and non-Power 5 institutions. Ticket sales for the Power 5 institutions increased, but a much larger increase was observed for the non-Power 5 institutions. The increases in media rights and licensing

showed similar increases for both the Power 5 and non-Power 5 institutions. Grants and contracts increased for the non-Power 5 institutions, but a much larger increase was displayed for Power 5 institutions. The increase in contributions for the Power 5 institutions was much larger than the increase displayed for the non-Power 5 institutions. An increase in gifts was displayed for both the Power 5 and the non-Power 5 institutions, but the non-Power 5 showed a much larger increase. A decrease was observed for subsidies for the Power 5 institutions, and a slight increase was showed for the non-Power 5 institutions. State appropriations decreased at a similar rate for both the Power 5 and non-Power 5 institutions. The financial trend data for the Power 5 and non-Power 5 institutions is displayed in Table 14.

Table 14

Financial Trends — Comparison between Power 5 and Non-Power 5 Institutions

Financial Trend from 2006–2012	Power 5	Non-Power 5
Ticket Sales	+13%	+33%
Tuition	+58%	+57%
Media Rights	+78%	+61%
Grants and Contracts	+25%	+4%
Contributions	+55%	+22%
Gifts	+43%	+112%
Subsidies	-9%	+5%
State Appropriations	-3%	-1%

The financial trend data which displays a comparison between the financial trends in intercollegiate athletics and higher education from 2006–2012 is displayed in Table 15.

Table 15

Financial Trends — Comparison of Intercollegiate Athletics and Higher Education

Financial Trend from 2006–2012	Intercollegiate Athletics	Higher Education
	Ticket Sales	Tuition
Power 5	+13%	+58%
Non-Power 5	+33%	+57%
	Media Rights and Licensing	Grants and Contracts
Power 5	+78%	+25%
Non-Power 5	+61%	+4%
	Contributions	Gifts
Power 5	+55%	+43%
Non-Power 5	+22%	+112%
	Subsidies	State Appropriations
Power 5	-9%	-3%
Non-Power 5	+.5%	-1%

The tuition revenue increased at a much higher rate than ticket sales. The revenue from media rights and licensing increased at a much higher rate than grants and contracts. The revenue from gifts increased at a much higher rate than contributions. Subsidies decreased at a higher rate than state appropriations, but subsidies increased at a nominal rate for Non-Power 5 institutions, while state

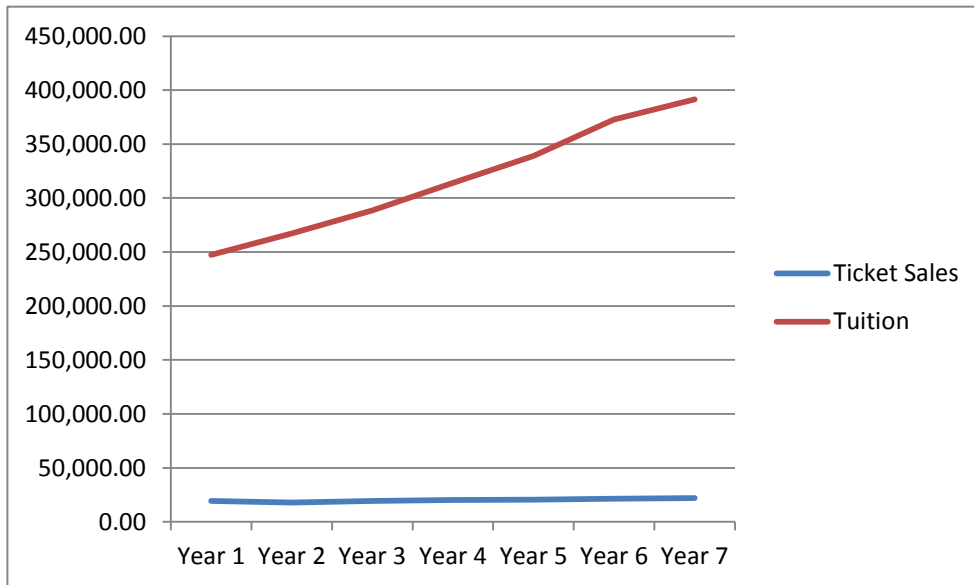
appropriations experienced a decrease for institutions in the Power 5 and Non-Power 5 during the two years observed in the study.

2006 – 2012

Power 5

Ticket sale revenue increased by 13%

Tuition revenue increased by 58%

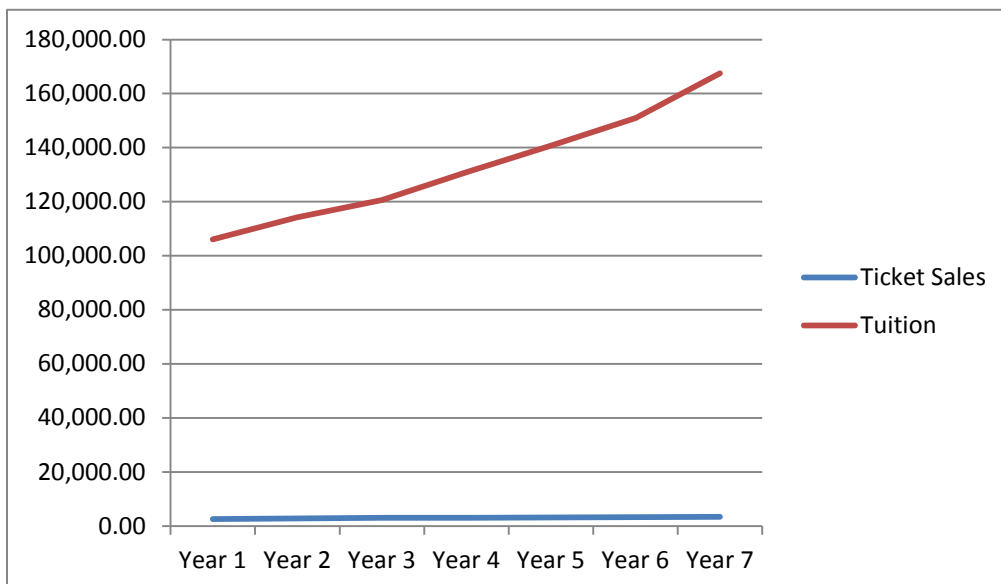


2006 – 2012

Non-Power 5

Ticket sale revenue increased by 33%

Tuition revenue increased by 57%

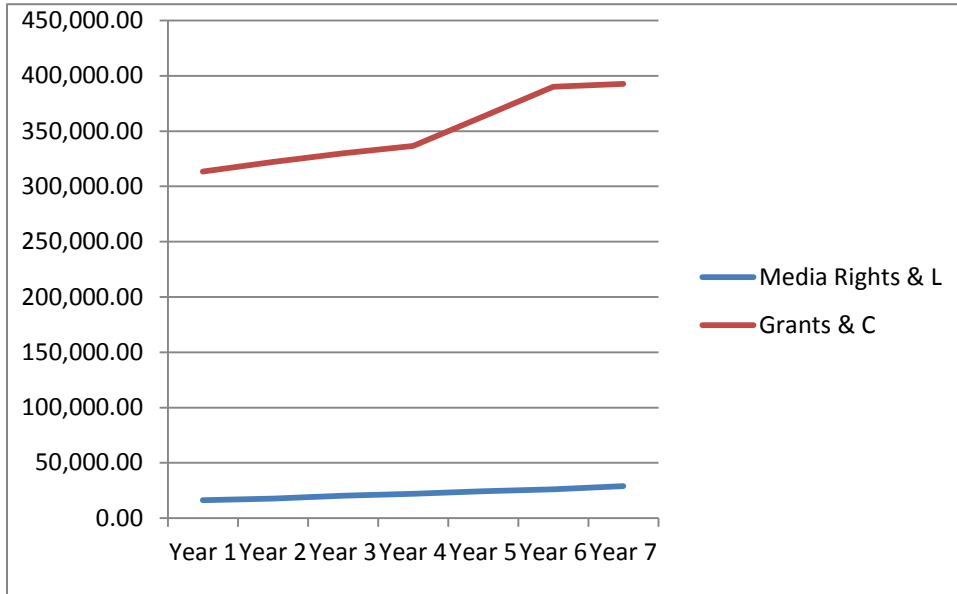


2006 – 2012

Power 5

Media Rights and Licensing increased by 78%

Grants and Contracts revenue increased by 25%

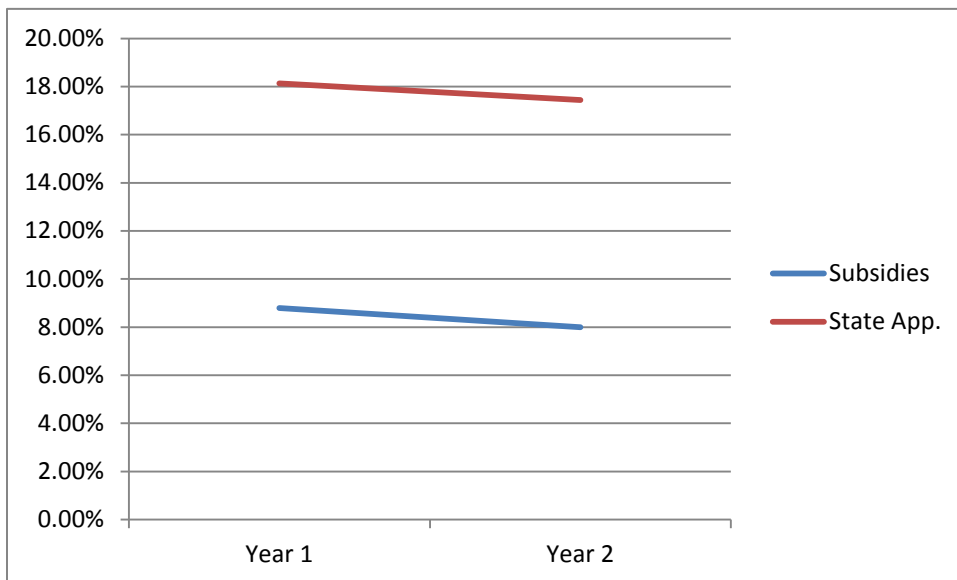


2006 – 2012

Non-Power 5

Media Rights and Licensing increased by 61%

Grants and Contracts revenue increased by 4%

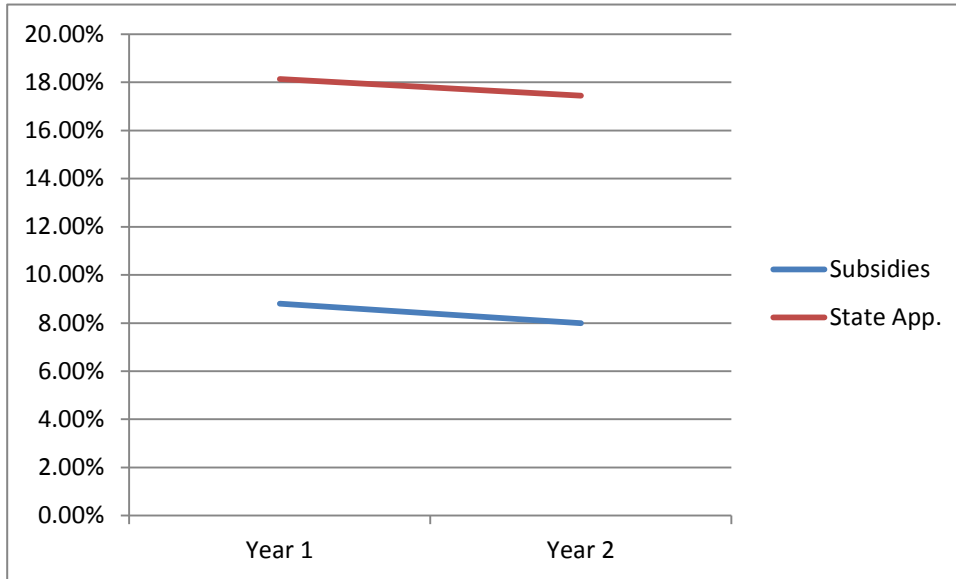


2006–2012

Power 5

Subsidies decreased by 9%

State Appropriations decreased by 3%

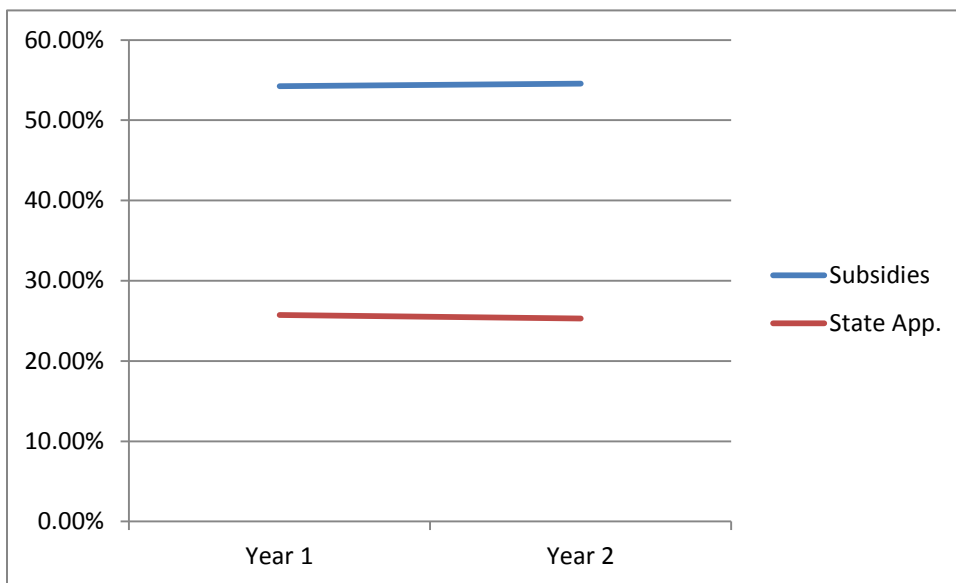


2006–2012

Non-Power 5

Subsidies increased by .5%

State Appropriations decreased by 1%



CHAPTER 5. INTRODUCTION, SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

The purpose of this study was to examine how financial trends in intercollegiate athletics mirror financial trends at institutions of higher education. The researcher analyzed 86 institutions in the FBS to determine how financial trends in intercollegiate athletics compare with financial trends in higher education for those same institutions. The study examined how financial trends in intercollegiate athletics and higher education compare for the Power Five and Non-Power Five conferences in the FBS.

The research focused on a seven year time frame from 2006–2012 and compared similar areas in intercollegiate athletics directly to an area in higher education with an equivalent function. The study involved the selection of eight variables with four areas respectively being selected from intercollegiate athletics and higher education. The four areas selected from intercollegiate athletics and the four areas selected from higher education were responsible for revenue generation or received a percentage of revenue to supplement operational costs. The data reviewed revolved around four primary research questions appropriate to the study conducted.

The four research questions were examined, and this chapter will include a summary of findings, the conclusions derived as a result of the study, the implications

from the study and suggestions for future research than can expand on the information obtained during the study.

Research Questions

The study was conducted to examine the following research questions:

1. How do the trends in ticket sales (athletics) and tuition (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?
2. How do the trends in media rights and licensing (athletics) and grants and contracts (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?
3. How do the trends in contributions (athletics) and gifts (institution) compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period?
4. How do subsidies (athletics) and state appropriations (institution) compare for members of the five power conferences and the balance of the FBS during the two most recent years of the study?

Summary

The study involved an analysis of 86 institutions from the FBS with a focus on specific areas of revenue generation in intercollegiate athletics and higher education. The research focused on eight primary sources that generate revenue and a description of function. Influences on the revenue source were also included during the analysis. The review of literature provided specific insight and confirmed relevant information about the revenue generating variable. Different strategies and techniques were also

examined to understand the dynamics that impact revenue generation for each specific variable identified for the study.

The first question posed in this study asked how trends in ticket sales and tuition compare for members of the five power conferences and other members of the FBS over a seven year period. The ticket sales revenue for the power five conferences increased with the exception of the first year to the second year observed in the study, and the tuition revenue increased in each of the seven years of the study. The ticket sales revenue for the non-power five conferences increased except for 2008–2009, and the tuition revenue increased in each of the seven years represented in the study. The tuition revenue increased at a much higher rate compared to ticket sales.

The second question in the study asked how trends in media rights and licensing and grants and contracts compare for members of the five power conferences to trends for those variables among other members of the FBS over a seven year period. The revenue earned from media rights and licensing for power five institutions increased in each of the seven years of the study, and revenue earned from grants and contracts increased for each of the seven years represented in the study. The revenue earned from media rights and licensing for non-power five institutions increased in each of the seven years of the study, and revenue earned from grants and contracts increased except for 2007–2008, when revenues decreased from the numbers reported for the initial year of the study. The revenue earned in 2009 did represent an increase from the previous year, but still fell below the amount of revenue generated during the initial year observed in this study. The media rights and licensing revenue increased at a much higher rate than grants and contracts.

The third question in the study asked how trends in contributions and gifts compare for members of the five power conferences to trends for those variables among members in the balance of the FBS over a seven year period. The revenue earned from contributions for power five conferences increased in each of the seven years, with the exception of 2008–2009 and 2010–2011, when a slight decrease in revenue was observed. The gift revenue for power five institutions increased in each of the seven years, with the exception of 2009–2010, when a slight decrease in gift revenue was observed. The revenue earned from contributions for non-power five conferences decreased during the 2006–2007 year and from 2008–2010, but an overall increase in contributions was observed from the first year to the last year in the study. The revenue earned from gifts for the non-power five conferences increased with the exception of 2008–2009 and 2011–2012, which showed a decrease in revenue. Although in the last year of the study, 2011–2012, a decrease in gift revenue was recorded, gift revenue increased by two times from the first year (2006) to the last year of the study. The revenue earned from gifts increased at a much higher rate than contributions.

The fourth question in the study asked how subsidies to athletics and state appropriations compare for members of the five power conferences and the balance of the FBS institutions during the two most recent years of the study. The percentage of revenue received from subsidies in 2011–2012 decreased slightly for the power five conferences, and the percentage of revenue received from state appropriations decreased slightly during those two years for the power five conferences. The percentage of revenue received from subsidies in 2011–2012 slightly increased for the

non-power five conferences, and the percentage of revenue received from state appropriations declined slightly during those two years. Subsidies decreased at a higher rate than state appropriations, despite subsidies increasing at a nominal rate for the non-power five institutions.

Conclusions

The current financial trends occurring in both intercollegiate athletics and higher education have created a need to evaluate sources of revenue generation. The review of revenue generation sources in intercollegiate athletics and higher education provided insight into the impact it has on the current financial trends that occur in both areas. A review in each of the areas will be independently pursued in order to provide a narrative about the literature, and the research conducted for this study.

The area of ticket sales is a concern from a revenue generation perspective for departments of intercollegiate athletics. This concern exists because to encourage spectator attendance a new strategy must be implemented or tickets will be so expensive, that consumers will determine at a certain point the costs exceed the experience provided from attendance at the event. The departments of intercollegiate athletics are working to find creative ways to encourage ticket acquisitions and developing ways to capture, as well as maximize, fan interest for specific games. The challenge for intercollegiate athletics department is to create a game day experience, so the experience of attending the contests exceeds the convenience of watching the game on television (Leeds & Von Allmen, 2004; Torrez Riley, 2012; Williams, 2012).

This study found that an increase in ticket sales for both the power five and non-power five institutions has occurred during the seven years reviewed in the study. The

trend for ticket sales was upward, but during the 2006–2007 year for power five institutions and during the 2008–2009 year for non-power five institutions, a slight decrease in ticket sales were observed. This study, similar to the findings described by (Leeds & Von Allmen, 2004; Torrez Riley, 2012; Williams, 2012), suggests that intercollegiate athletics has created an excitement on game days that continues to provide an incentive for fans to attend, because it rivals or surpasses the experience of watching college football games at home on television.

The revenue earned from tuition at institutions of higher education serves to support many of the initiatives set forth by the institution. The reduction in state appropriations has forced institutions of higher education to maximize current revenue streams (Robst, 2001). The institutions must be increasingly responsive to the demand of their students, since students are being required to assume many of the institutions operating costs (Zemsky, Massy, & Oedel, 1993).

This study supports the statements by Berg and Hoenack (1987) and Zemsky et al. (1993) which explain students will assume costs associated with higher education when the institution has an academic mission focused on service to students. This study found that tuition revenue increased in each of the seven years of the study for both institutions in the power five and non-power five institutions. The rate of increase for tuition revenue during the period of time observed for this study increased by more than 50% for both the power five and non-power five institutions. The data also suggest that institutions have implemented a tuition model that allows revenue generation to occur when costs increase for students.

This study focused on comparing financial trends in intercollegiate athletics and higher education. The rate of ticket sales (athletics) increased for both the power five and non-power five institutions, but the rate of tuition (higher education) increased at a much higher rate.

The generation of revenue from media rights and licensing in intercollegiate athletics represents a substantial source of revenue for departments of intercollegiate athletics. The advancement of the digital age and the numerous television channels resulted in the creation of the digital video recorder (DVR), which allows shows to be recorded and watched without viewing commercials. While this pattern is common in general, fans like to watch sports live, creating a seller's market for sports content (Zimbalist, 2013). The interest from external sources to provide such large sums of money is a direct reflection on the access sporting events provides to a large population of potential consumers to a sponsor (Mullin, et al., 2007, p. 18). The revenue earned from media rights is a prominent source of earning power in an intercollegiate athletic department, and institutions work to seek external business opportunities to generate revenue (Dennie, 2012; Giroux & Giroux 2012). The revenue earned from media rights and licensing experienced an upward trend for each of the seven years represented in the study.

This study, as expressed by Zimbalist (2013), showed media rights and licensing is a prominent source of revenue in intercollegiate athletics, and value exists for companies to market to consumers during live, televised athletic events. The results from this study found an upward trend in revenue occurred during the seven years of the study for power five and non-power five institutions benefit from regional sports

network (RSNs) covering their content (Zimbalist, 2013). The revenue earned from media rights and licensing increased from year to year for the seven years observed in the study for both power five and non-power five institutions.

The revenue earned from grants and contracts at institutions of higher education is a result of institutions working to find creative ways to generate revenue. The financial support provided from corporate partnerships allows for institutions to maintain an ownership stake in sponsoring research initiatives, without assuming all the risks. The involvement of financial partners creates an opportunity for institutions to conduct research in a manner that might not be otherwise possible without the financial capital of a large company (Press & Washburn, 2000).

The results of this study, as stated by Press and Washburn (2000), express that revenue earned from grants and contracts is trending upward and allows institutions to derive revenue from relationships with corporations to sponsor research at institutions of higher education. This study concluded that revenues from grants and contracts increased for institutions in the power five and non-power five. The revenues for grants and contracts increased in each of the seven years of the study for the power five institutions. The revenues decreased in 2007–2008 and 2011–2012 for the non-power five institutions, but the trend from year one to year seven was positive.

This study focused on the trends in intercollegiate athletics and how they compare to trends in higher education. The revenue earned from media rights and licensing (athletics) was compared to revenue earned from grants and contracts (higher education). The study showed revenue earned from media rights and licensing and grants and contracts experienced an increase during the seven years observed in this

study. The revenue earned from media rights and licensing increased at a much higher rate than revenue earned from grants and contracts during the period of the study. The financial trends in intercollegiate athletics and higher education show an upward trend with athletics revenue increasing at a higher rate than higher education.

The revenue earned from contributions in intercollegiate athletics represents a substantial amount of revenue for departments of intercollegiate athletics. The contributions in intercollegiate athletics are incentivized as a result of tax deductions and the inclusion of ticket benefits as a result of contributions. This purchase of “priority seating” is an important avenue to solicit contributions, as 80 percent of the donation is generally deductible (Department of Treasury – IRS, 2013; McEvoy, Morse, & Shapiro, 2013). The aforementioned research conducted also displayed that a positive correlation exists between the success of athletics and the revenue received from contributions at a department of intercollegiate athletics (Goff, 2000). The University of Oregon recently became the leader in athletic revenue on the strength of contributions, surpassing the University of Texas, which held the top position for several years (College Athletics Finances Database, USA Today – NCAA, 2014).

This study found, similar to the analysis conducted by McEvoy, Morse, and Shapiro (2013), Goff (2000), and College Athletics Finances Database, USA Today – NCAA, revenue contribution is positively correlated to athletic success. The research in this study displayed the power five institutions yielded increases in contributions during each of the seven years observed, except from 2008–2009 and 2010–2011 when a nominal increase in revenue occurred. The non-power five institutions realized an

increase in revenue from year one to year seven, but experienced a decrease in revenue from 2006–2007 and for two years during 2008–2010.

The revenue earned from gifts at an institution of higher education support many of the academic missions of the institution. The revenue earned from private individuals has been the primary source of voluntary support, accounting for about 50 percent of the charitable contributions received between 1975–1976 and 1980–1981 (Council for Financial Aid to Education, 1982; Leslie & Ramey, 1988). The research of Baade and Sundberg (1993), Okunanade (1996), and Cunningham and Cochi-Ficano (2002) displays the importance of cultivating relationships with former students and how engaging alumni in institutional programs that interest them can facilitate financial contributions to the institution.

This study compares favorably to the research conducted by Leslie and Ramey (1988), which shows the importance of gifts and the large revenue stream voluntary support “gifts” provide to institutions of higher education. This study showed gift revenue trended upward for institutions in the power five and non-power five. The institutions in the power five showed an upward trend in gift revenue, except between 2009–2010. However, the revenue earned from gifts experienced over a 40 percent increase during the years displayed for this study. The institutions in the non-power five showed an increase in revenue for each of the seven years represented in the study, with revenue increasing over 100 percent from 2006–2012.

The revenue earned from contributions (athletics) was compared to revenue earned from gifts (higher education). The study found revenue earned from contributions and gifts increased during the seven years observed from 2006–2012.

The revenue earned from gifts increased at a much higher rate than contributions, with gift revenue yielding over a 100 percent increase in revenue during the seven years of the study. The financial trends in intercollegiate athletics and higher education show an upward trend, with philanthropic revenues trending upward at a higher rate during the period of this study.

The percentage of revenue allocated to intercollegiate athletics from an institution or derived from student fees is referred to as a subsidy, and for this study, the amount is expressed as a percentage. The subsidies provided to the larger revenue generating intercollegiate athletic programs is substantially smaller than funding provided to the smaller FBS institutions (College Athletics Financial Database, USA Today – NCAA, 2012; Denhart & Vedder, 2010). The funding and support from the institution for intercollegiate athletics occurs because it provides a source of unity for the campus community, as well as being an integral part of the student experience (Thelin & Wiseman, 1990; Toma, 2010).

This study, as explained by Denhart and Vedder (2010) and the College Athletics Financial Database (2012), displays the decrease in funding being provided to institutions to subsidize expenses incurred by intercollegiate athletic departments. The power five and non-power five institutions showed a decrease in revenue for the two years observed in the study. The percentage of revenue received from subsidies increased a nominal amount for the non-power five institutions, but it remains difficult for the non-power five conferences to be competitive in the FBS.

The percentage of revenue provided by the state government to institutions of higher education is referred to as state appropriations. The financial support of the

state provides opportunities for educational programs to be innovative and affordable for students at the institution. The institutions will have to rely less on state funding and develop a system that is more efficient, as well as attentive to the preferences of the consumer (Lyall & Sell, 2006).

This study, as conveyed by Lyall and Sell (2006), shows funding from state government is decreasing, and institutions of higher education will have to generate revenue to support academic initiatives. The percentage of state appropriations to power five institutions and non-power five institutions decreased slightly during the two years represented in the study.

The revenue derived from subsidies (athletics) was compared to revenue derived from state appropriations (higher education). The study found subsidies decreased at a higher rate than state appropriations with subsidies decreasing at twice the rate of state appropriations over the two years observed for this study.

Implications

The research conducted provided insight into the financial trends that exist in intercollegiate athletics and higher education. The review of the literature provided valuable insight into the rationale for fiscal management decisions that occur on a college campus.

A review of the literature suggests that intercollegiate athletics earns a great deal of revenue from media rights and licensing. The ability of institutions to capitalize on earnings from media rights and licensing is a direct result of the decision rendered in the *NCAA v. Board of Regents of the University of Oklahoma et al. (1984)*. The court held the television plan of the NCAA constituted illegal price fixing, and member institutions

were unable to meet consumer demands. As a result, the institutions could negotiate contracts to maximize opportunities and provide greater television access of their product to fans (Scully, 1984). Ironically, high quality television broadcasts allow fans/customers to watch intercollegiate athletics at home, which impacts the feasibility for consumers to attend sporting events (Solomon, 2014; Torrez Riley, 2012).

The revenue earned from contributions in intercollegiate athletics is impacted by home attendance at football games, so in the near future it will be important to find innovative ways to engage the consumers with the institution in other ways (McEvoy, Morse, & Shapiro, 2013). It will be incumbent upon departments of intercollegiate athletics to be integrated into the campus community. An established connection between intercollegiate athletics and academics allow an institution to justify subsidizing expenses in intercollegiate athletics, because of the positive benefits that intercollegiate athletics has at an institution of higher education (Brand, 2006; Plato, edited 1951).

A review of the literature suggests that a thorough financial analysis must occur in both intercollegiate athletics and higher education to determine how to generate revenue, as well as maximize resources. A financial strategy must be developed in order to attack the potential loss of revenues in a culture that requires innovative thinking to meet the rising expectations of the consumer in both intercollegiate athletics and higher education. The difficulty in attaining this goal is the current revenue generating sources have been maximized, and potential sources of substantial revenue do not appear to be a viable option. It will be imperative to evaluate the current model to determine what changes to the structure could produce additional revenue. The privatization in higher education yields additional revenue and reduces the amount of

state appropriations necessary to fund initiatives of the institution. Intercollegiate athletic departments strive to generate revenue in order to be self-sufficient, which decreases the burden of the institution to subsidize athletics. It will be important to analyze where the revenue earned is being spent in order to determine how expenses can be reduced or eliminated (Lyall & Sell, 2006).

The primary focus of the research was to compare revenue earned in intercollegiate athletics and higher education. The research also focused on the same variables, but specifically observed how the Power 5 and Non-Power 5 institutions compare. The observation of ticket sales during the study revealed the limitations on existing seating capacity is a volume constraint, so increasing revenue can only be achieved by increasing ticket prices. Sensitivity to consumers is important, so ticket prices must increase incrementally in order to ensure the loyal fan base does not feel disenfranchised, because ticket sales represent a considerable amount of revenue of an intercollegiate athletics budget.

The revenue earned from tuition is generating large sums of money in higher education. The current tuition model involves a high tuition, high aid model which has to be closely monitored because this trend can't sustain itself over time. The evaluation of the current higher education model must occur in order to reduce the pressure of creating revenue, as state funding to support higher education decreases.

The revenue earned from media rights and licensing has become a substantial source of revenue in intercollegiate athletics and either rivals or exceeds ticket sales, as the most important funding source of an intercollegiate athletics budget. The research shows a potential exists for intercollegiate athletics to create revenue by partnering with

companies to profit from customers viewing live intercollegiate athletic events, but relying on an external source to represent the bulk of earned revenue is something intercollegiate athletics departments must carefully evaluate.

The revenue earned from grants and contracts represents an opportunity to create some additional revenue, which may become important as state funding in higher education declines. The Non-Power 5 institutions must find a way to impress upon research companies the value a partnership with an institution of higher education can provide for their business, which would generate more revenue for higher education initiatives.

Revenue earned from contributions and gifts are increasing which show a strategic approach with a collaborative message might allow both athletics, as well as higher education to optimize revenue. It will be important to focus on potential donors with a unified message to determine how to leverage the passion for intercollegiate athletics, so higher education can thrive and allow intercollegiate athletics to survive in the current higher education model.

The loss of subsidies as well as state appropriations show it is important to manage revenue without compromising customer service. The research shows that support from external sources to fund both intercollegiate athletics and higher education initiatives are on a downward trend. It will be imperative to evaluate expenditures in intercollegiate athletics and higher education to sustain the current models that exist.

The amount of subsidization provided to institutions in the Non-Power 5 present challenges in athletics, because of the inability to generate comparable revenue to institutions included in the Power 5. The revenue generation opportunities are much

greater for Power 5 members, which creates more pressure for the Non-Power 5 institutions to spend dollars dedicated to higher education on athletics, in an attempt to be competitive. The management of expenses will be critical for both members of the Power 5 and Non-Power 5, but financial management principles will not allow the Non-Power 5 institutions to match revenue earned by Power 5 institutions. A careful review of the new NCAA structure acknowledges that Non-Power 5 institutions are at a competitive disadvantage if forced to operate under the same model as institutions that are earning substantially more revenue.

Recommendations for Future Research

A review of revenues and expenses of the FBS institutions in both the power five and non-power five conferences would provide an opportunity to analyze how funds are being allocated on a FBS campus. A more current view of revenues in the last few years, since this study utilized data collected since 2012, could reveal different results, and the current data would comprise research compiled through 2014. The more recent data would provide a more accurate depiction of the current fiscal trends in intercollegiate athletics. The financial statements from each institution could be retrieved in a similar manner as conducted for this study to acquire the higher education data, and the most current data from the NCAA database could be viewed to obtain the revenue data for intercollegiate athletics.

A study could be conducted to expand on the current research by reviewing not only revenues, but also expenses for intercollegiate athletics and higher education. The review of the expenses would provide insight into the use of the revenue generated for both intercollegiate athletics and higher education. The analysis would also provide an

opportunity to consider alternative ways to manage expenses which would diminish the current pressure felt in every area of higher education to generate additional revenue.

A comparison of revenue and expense data for institutions in the Football Championship Subdivision (FCS) against institutions in the FBS would provide an opportunity to evaluate fiscal management at both the FCS and FBS level. The analysis would specifically focus on converting the revenue and expense data into a ratio analysis or a percentage, rather than a dollar figure, in order to compare revenue generation in the FCS against revenue generation that occurs at the FBS level. This standardization of the data would facilitate uniformity and assist in the comparison of revenue between the FCS and FBS.

The revenue and expense data could be expanded by comparing the individual conferences within the power five and the non-power five. An analysis also could be conducted to determine how the least successful power five institutions compare with the most successful non-power five institutions, after analyzing both revenues and expenses during a certain period of time.

A comparison of revenue and expense data could address the differences that exist within the institutions represented in the power five. This analysis would provide an opportunity to determine the disparity that exist between the top revenue generating institutions in the power five to the lower revenue generating institutions within the power five, with broad implications for competitive equity, recruiting equity, and organizational structure in athletics.

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APPENDIX A
LIST OF THE SPECIFIC INSTITUTIONS UTILIZED

POWER FIVE INSTITUTIONS

- | | | |
|---------------------------|---------------------------|-----------------------|
| 1). Kentucky | 18). Virginia | 35). Oklahoma |
| 2). Mississippi State | 19). Virginia Tech | 36). Texas |
| 3). Alabama | 20). North Carolina | 37). Texas Tech |
| 4). Florida | 21). North Carolina State | 38). West Virginia |
| 5). Ole Miss | 22). Michigan State | 39). Colorado |
| 6). Louisiana State (LSU) | 23). Indiana | 40). California |
| 7). Tennessee | 24). Nebraska | 41). Oregon |
| 8). South Carolina | 25). Minnesota | 42). Arizona |
| 9). Auburn | 26). Ohio State | 43). Utah |
| 10). Georgia | 27). Michigan | 44). UCLA |
| 11). Arkansas | 28). Maryland | 45). Washington |
| 12). Texas A&M | 29). Purdue | 46). Oregon State |
| 13). Missouri | 30). Illinois | 47). Washington State |
| 14). Louisville | 31). Rutgers | 48). Arizona State |
| 15). Florida State | 32). Kansas | |
| 16). Clemson | 33). Iowa State | |
| 17). Georgia Tech | 34). Kansas State | |

NON-POWER FIVE INSTITUTIONS

- 1). Houston
- 2). Cincinnati
- 3). Central Florida
- 4). Connecticut
- 5). East Carolina
- 6). Memphis
- 7). South Florida
- 8). UNLV
- 9). Utah State
- 10). San Diego State
- 11). Nevada
- 12). Fresno State
- 13). Wyoming
- 14). Hawaii
- 15). New Mexico
- 16). Boise State
- 17). Bowling Green
- 18). Ohio
- 19). Western Michigan
- 20). Kent State
- 21). Central Michigan
- 22). Eastern Michigan
- 23). Akron
- 24). Toledo
- 25). Miami (Ohio)
- 26). Ball State
- 27). Louisiana Lafayette
- 28). Arkansas State
- 29). New Mexico State
- 30). Idaho
- 31). Louisiana Monroe
- 32). UAB
- 33). Marshall
- 34). Middle Tennessee State
- 35). Southern Mississippi
- 36). Florida International
- 37). Florida Atlantic
- 38). North Texas

INSTITUTIONS INCLUDED IN STUDY BY CONFERENCE

- 1). Atlantic Coast Conference (ACC)
- 2). Big Ten
- 3). Big Twelve
- 4). Pacific Athletic Conference (PAC 12)
- 5). Southeastern Conference (SEC)
- 6). American Athletic
- 7). Conference USA
- 8). Mid-American Conference (MAC)
- 9). Mountain West Conference
- 10). Sun Belt Conference

INSTITUTIONS EXCLUDED FROM THE STUDY

- 1). Oklahoma State
- 2). Penn State
- 3). Pittsburgh
- 4). Temple
- 5). Air Force
- 6). Army
- 7). Navy
- 8). Wisconsin
- 9). Iowa
- 10). Colorado State
- 11). University of Texas at El-Paso (UTEP)
- 12). Buffalo
- 13). San Jose State
- 14). Northern Illinois
- 15). Louisiana Tech
- 16). Troy
- 17). San Diego State

APPENDIX B

USA TODAY ARTICLE – METHOD FOR DATA COLLECTION

Methodology for NCAA athletic department revenue database

METHODOLOGY

The data, updated for 2014, are based on the revenue and expense reports collected from more than 225 public schools in the NCAA's Division I that have an obligation to release the data (the NCAA does not release the data publicly). The others are private or are covered under a state exemption.

The best way to use the data is to compare a school's expenses over time to see how they have changed. Because the categories are standardized, comparisons between schools are possible as well. The school's president or chancellor reviews the data before it's submitted to the NCAA, which also does a general audit of the data. In an effort to standardize reporting, NCAA staff members have worked with the National Association of College and University Business Officers to formulate definitions for each category. Still, some schools interpret the reporting rules slightly differently.

Schools' conference membership, typically the affiliation for basketball, are based on alignments for the 2013-14 school year.

Note: Dollar amounts have not been adjusted for inflation.

Source: USA TODAY public records requests to each university.

CATEGORY EXPLANATIONS

Summary categories

Total Revenue: Includes all sources of operating revenue.

Total Expenses: Includes all operating expenses.

Total Subsidy: The sum of student fees, direct and indirect institutional support and state money. The NCAA and others consider such funds "allocated" or everything not generated by the department's athletics functions.

Percent subsidy: Percent of revenues from allocated sources.

Revenue categories

Ticket sales: Sales of admissions to athletics events. Include ticket sales to the public, faculty and students, and money received for shipping and handling of tickets. Does not include amounts in excess of face value (such as preferential seating) or sales for conference and national tournaments that are pass-through transactions.

Contributions: Includes amounts received directly from individuals, corporations, associations, foundations, clubs or other organizations by the donor for the operation of the athletics program. Amounts paid in excess of a ticket's value. Contributions include cash, marketable securities and in-kind contributions such as dealer-provided cars, apparel and drink products for team and staff use. Also includes revenue from preferential seating.

Rights/Licensing: Includes revenue for athletics from radio and television broadcasts, Internet and e-commerce rights received from institution-negotiated contracts, the NCAA and conference revenue sharing arrangements; and revenue from corporate sponsorships, licensing, sales of advertisements, trademarks and royalties. Includes the value of in-kind products and services provided as part of the sponsorship (e.g., equipment, apparel, soft drinks, water and isotonic products).

Student fees: Fees assessed to support athletics.

School funds: Includes both direct and indirect support from the university, including state funds, tuition, tuition waivers etc. as well as federal Work Study amounts for athletes. It also includes university-provided support such as administrative costs, facilities and grounds maintenance, security, risk management, utilities, depreciation and debt service.

Other: All other sources of revenue including game guarantees, support from third-parties guaranteed by the school such as TV income, housing allowances, camp income, etc.; tournament/bowl game revenues from conferences; endowments and investments; revenue from game programs, novelties, food or other concessions; and parking revenues and other sources.

Expense categories

Coaching/staff: All salaries, bonuses and benefits reported on the university's tax forms for coaches and staff, as well as third-party contributions.

Scholarships: Athletically related student aid, including summer school and tuition discounts and waivers (including aid given to student-athletes who have exhausted their eligibility or who are inactive due to medical reasons), and aid for non-athletes such as student managers.

Buildings/grounds: Facilities costs charged to the athletics program, including debt service, maintenance, utilities and rental fees.

Other: Includes guarantees paid to other schools, severance payments to past coaches and staff, recruiting, team travel, equipment and uniforms, game day and camp expenses, fundraising and marketing costs, spirit group support, medical expense/insurance and conference dues. It also includes expenses charged to athletics by the university, such as building maintenance.

USA TODAY – College Financial Database/ NCAA Reported Data

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Oregon							
Conference: PAC-12							
SCHOOL FINANCES							REVENUES
YEAR	TICKET SALES	CONTRIBUTIONS	RIGHTS / LICENSING	STUDENT FEES	SCHOOL FUNDS	OTHER	TOTAL REVENUES
2014	\$26,625,906	\$124,927,474	\$35,580,734	\$1,715,099	\$440,000	\$6,741,185	\$196,030,398
2013	\$25,257,158	\$46,627,597	\$31,027,271	\$1,524,045	\$813,332	\$9,991,667	\$115,241,070
2012	\$23,349,642	\$32,387,615	\$28,303,172	\$1,524,044	\$951,816	\$8,119,540	\$94,635,829
2011	\$19,982,098	\$33,214,707	\$22,481,100	\$1,460,076	\$959,779	\$7,721,939	\$85,819,699
2010	\$18,102,199	\$73,809,775	\$21,116,658	\$1,544,344	\$1,140,798	\$6,680,709	\$122,394,483
2009	\$17,153,036	\$17,909,222	\$17,930,450	\$0	\$1,398,094	\$4,658,443	\$59,049,245
2008	\$17,410,851	\$18,347,181	\$17,091,388	\$0	\$1,168,411	\$2,606,070	\$56,623,901
2007	\$15,545,126	\$10,589,184	\$17,924,452	\$0	\$0	\$6,431,009	\$50,489,771
2006	\$13,418,338	\$11,863,044	\$11,887,952	\$1,417,567	\$0	\$6,610,368	\$45,197,269
2005	\$12,151,382	\$11,651,406	\$9,165,238	\$1,369,845	\$0	\$5,638,764	\$39,976,635

APPENDIX C

Statement of Revenues, Expenses and Changes in Net Position

Year Ended June 30, 2014 (in thousands of dollars)

Operating Revenues

Student tuition and fees, net of scholarship allowances of \$185,513	\$	484,809
Federal grants and contracts		308,291
State grants and contracts		11,286
Local grants and contracts		1,614
Nongovernment grants and contracts		96,096
Sales and services of educational departments		44,321
Auxiliary enterprises, net of scholarship allowances of \$5,404		191,163
Other operating revenues		16,387
Total operating revenues	\$	1,153,967

Operating Expenses

Educational and general		
Instruction	\$	425,722
Research		396,680
Public service		84,572
Academic support		203,545
Student services		46,380
Institutional support		117,956
Operation and maintenance of plant		86,097
Scholarships and fellowships		64,070
Auxiliary enterprises		160,938
Depreciation (Note 5)		<u>116,781</u>
Total operating expenses	\$	1,702,741
Operating Loss	\$	(548,774)

