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An Examination of NCAA Division I Football Bowl Championship Subdivision Department Revenues and Expenditures and Their Effect on Athletic Success in a Mid-Major Athletic Conference

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Abstract

Athletic department expenditures within National Collegiate Athletic Association (NCAA) Division I athletics are in many cases growing faster than the general university budget. Universities are spending millions on athletics, specifically in the sports of men's basketball and football, to achieve athletic success and to generate marketing exposure for the university. Typical spending comes in upgrading facilities and luxuries oftentimes justified to enhance winning, revenue generation, overall university exposure, enrollment, and fundraising. For this study, athletic and university success is defined as significant gains in these five aforementioned areas. The purpose of this study is to examine the effect increased expenditures have had on "mid-major" athletic programs (specifically those who are not affiliated with the College Football Bowl Championship Series) such as the Mid-American Conference (MAC) to see if those increases influence a positive or negative outcome on athletic and/or university success. The researchers found, in the case of the Mid-American Conference, that increased expenditures do not significantly increase athletic and or university success and often results in reductions in other sports programs and increases in institutional subsidies to cover increasing expenses. In addition, the researchers present potential areas of savings which might enable intercollegiate athletic programs to keep athletic programs rather than eliminating or reducing them to meet Title IX gender equity requirements or financial contingencies.

Within the United States, the National Collegiate Athletics Association (NCAA) is the primary intercollegiate athletics governing body for varsity sports at four-year colleges. Within the NCAA, there are three divisions (Divisions I, II, and III). Division I institutions typically place a greater emphasis on athletics compared to II and III and are permitted to offer the largest number of athletics scholarships per sport. Division I is further subdivided into Division I-Football Bowl Series (FBS) and Division I-Football Championship Series (FCS). The phrase "BCS conference" refers to a school's affiliation with one of the six major conferences whose conference champion receives a bid to a Bowl Championships Series (BCS) game in the sport of football (Bowl Championship Series, 2011[1] FBS schools are generally more competitive, have larger budgets and oftentimes have more students than FCS schools, which is why FCS schools are sometimes referred to as mid-major programs as opposed to the major programs that can compete for the BCS title (Vedder, Villwock & Denhart, 2009).

Athletic department expenditures at many Division I institutions are growing faster than the general university budget (Denhart & Vedder, 2010; Litan, Orszag & Orszag, 2003). The division featuring the largest budgets and most commercially competitive collegiate programs is NCAA Division I. The intercollegiate athletics budgets for Division FCS and FBS programs range from just under $20 million annually to well over $100 million annually (Vedder, et al., 2009). The purpose of this study is to examine the affect increased expenditures have had on mid-major athletic programs (specifically those who are not affiliated with the Bowl Championship Series) such as the Mid-American Conference (MAC) to see if those increases influence a positive or negative outcome on athletic and/or university success.

[1] The eleven FBS conferences are the: Atlantic Coast Conference (ACC), Big 12 Conference, Big East Conference, Big Ten Conference (Big-10), Conference USA (C-USA), Mid-American Conference (MAC), Mountain West Conference (MWC), Pacific-10 Conference, Southeastern Conference (SEC), Sun Belt Conference, and the Western Athletic Conference (WAC).

The MAC was established in 1946 and currently features an East and a West Division for the 12-member conference. A 13th school, Temple University, has membership in the sport of football only. The East Division consists of the University of Akron, Bowling Green State University, the University at Buffalo, Kent State University, Miami University, Ohio University, and Temple University. Competing in the West Division is Ball State University, Central Michigan University, Eastern Michigan University, Northern Illinois University, the University of Toledo, and Western Michigan University (Mid-American Conference, n.d.). MAC schools have a total student population of 240,000 making it the third largest DI conference by enrollment (Mid-American Conference, n.d.).

The challenge for mid-major Division I colleges is to compete in the division on a much smaller budget which has been financially taxing for many members of the conference. For example, Eastern Michigan University (EMU), a school seven miles from the athletic powerhouse, the University Michigan uses 13% of its total university budget to subsidize athletics and the athletic department is over 90% subsidized (Vedder, et al., 2009). In recent years mid-majors have been faced with greater inequality in revenue sport spending between themselves and larger schools (Denhart & Ridpath, 2011) This is due to fixed costs associated with sponsoring programs, which make athletic department expenditures a higher percentage of the university's entire budget at smaller schools (Litan, et al., 2003, Sander & Fuller, 2011). The revenue sports teams are generally considered to be the football and men's basketball teams, which receive the bulk of donation dollars and general fees appropriations at most institutions (Denhart & Ridpath, 2011; Vedder et al., 2009) While these teams are considered to be revenue generators, often at mid-major colleges and even BCS institutions, their expenses outweigh the money they bring in and cause the athletic department to run a deficit, creating a continual need to be supported by student general fee and institutional support contributions (Berkowitz & Upton, 2011; McCarthy, 2010). For example at Ohio University $13.5 million of the roughly $18 million dollar athletic department budget is funded by student general fees (Bernheim, 2007; Carrera, 2007; Denhart & Ridpath, 2011; Vedder,

et al., 2009). Though most non-revenue sports are unable to generate substantial revenue, they receive miniscule budget allocations compared to the two sports that receive the lion's share of the budget (Bergmann, 1991; Denhart & Ridpath, 2011; Ridpath, 2011).

Recent athletic success by some mid-major programs has fueled a drive for similar situated schools to compete at the higher levels of both football and basketball ostensibly to generate revenue for the athletic department and to increase revenue and marketing capabilities for the university (Frank, 2004). On many occasions college basketball has produced a Cinderella team, generally known as an unexpected entrant that achieves far more than is expected from them by advancing through the 68 team NCAA men's basketball tournament further than predicted. While these teams do not win the overall tournament, their success in advancing into the later rounds is remembered as one of the underdog achievements of the year. One team recently in the spotlight as this past decade's mid-major overachiever was Gonzaga University which experienced success starting in the mid 90's (Potter, 2008). The fallout of their success has been coined the "Gonzaga Syndrome" which refers to other mid-majors' efforts to significantly step up the intensity of their focus on winning, which typically means spending more money on infrastructure and salaries (DeCourcy, 2007). The result of this increased intensity and impatience in creating success has been the unprecedented 52 coaching changes following the 2006 season ostensibly to raise the chances of winning. It was in that season that George Mason University made a stunning march into the Final Four as a no. 11 seed (ABC News, 2006). At end of the 2010-11 season there were 39 coaching changes in men's basketball at the NCAA Division I level (Siegel, 2011).

A similar consequence of winning likened to the "Gonzaga Syndrome" is the "Flutie Effect." The legend of this effect began in 1984 when Boston College's Doug Flutie threw a game winning Hail Mary pass to beat the University of Miami. In the following year applications to Boston College shot up as a result of their exposure. This increase established a scenario relating athletic success to the school's popularity and coined the term the "Flutie Effect" (Flutie Effect, 2007). Many universities hold on to the idea

that successful athletic programs will create more interest and exposure for their university and therefore increase the quality of their applicant pool and there is some anecdotal evidence that this can influence these metrics (Frank, 2004; Vedder et al., 2010). For example the results of the Potter study (2008) appear to contradict this finding; their results showed that the SAT scores of the freshmen class at George Mason the year following their run to the Final Four were 25 points higher than the previous class. Research has yet to conclude that increases or selectivity in applicants are sustained in the long term due to a single event like the Flutie's pass; the effects are shown to last only one to three years at best (Potter, 2008).

However, the research results of Litan, et. al. (2003), appear to suggest that there is no correlation between athletic spending and greater SAT scores of incoming students which is often used as reasoning for increasing the quality of applicant pools. The athletic and commercial success experienced by these institutions, whether "major", or "mid major" is rarely sustainable or realistic to expect based on existing data and research (Frank, 2004; Litan et al., 2003). There are many teams that have been extremely successful one year, yet are unable to achieve anywhere near that success the next. Where there may be blips of success, the only thing that is sure to be sustained from year- to-year are the growing expenditures as athletic department spending at the NCAA Division I level, including schools defined as majors and mid-majors, is outpacing university spending by over 3% and growing (Denhart & Ridpath, 2011). The continual increase in spending at the Division I level is "justified" as a means to an end that results in high level marketing and revenue generation for the university (Vedder et al., 2009; Denhart & Ridpath, 2011). However, with limited resources, this success is difficult to achieve and even harder to maintain. Yet, many universities are chasing that dream and using ever-increasing institutional subsidies to finance the operation (Frank, 2004). Some have even resorted to eliminating other sports, and doing so under the guise of gender equity compliance, when the likely reason is due to funneling money into football and men's basketball (Ridpath, Lawrence, Yiamouyiannis & Galles, 2008).

Seeing as there are only rare occasions where mid-major programs excel to the point that they are nationally competitive, such as Boise State playing in BCS games over the past few years, at what cost should these programs be funded-ostensibly to benefit the entire university? One aspect of this study will explore the cost/benefit of what some consider exorbitant spending on only a couple of athletic department teams. A look at how this spending has resulted in athletic success will be important in determining the benefits of such expenditures. This research will also explore whether these attempts to keep up with athletic programs defined as major/BCS affect the financial viability of the athletic departments that run the programs. The idea of keeping up with elite programs would involve spending more to attract recruits, support athletes, provide facilities, and field teams that are similarly competitive to larger opponents. As an unintended or possibly intended consequence is the elimination of many sport opportunities to use funds for women's sports under the guise of Title IX compliance.

Title IX

Many university administrations' defense of sport elimination is the need to comply with Title IX gender equity requirements and as a cost saving measure (Munoz & O'Donnell, 2007). Title IX is a federal law (20 U.S.C. 1681-1688, 1972) that prohibits discrimination based on sex in educational programs and activities. Recent sport elimination controversies at Rutgers University, James Madison University, and the University of Delaware to name a few support this conclusion (Pearlman, 2011; Ridpath, et al. 2008). The gender equity mandate is exercised at any educational institution, public or private, that receives any form of federal funding (Women's Sports Foundation, 2008). One opinion is that this federal mandate is being used as a scapegoat by the universities so that they could avoid admitting that massive spending on football and men's basketball might be causing financial instability in athletic department's nationwide (Ridpath, et al. 2008).

The University

While it is ultimately a university's decision to choose what sports to sponsor, it can be argued that universities should be held accountable for those that use student general fee allocations that directly support intercollegiate athletics and state tax dollars that directly and indirectly support athletic programs. Not all programs use both or one of these sources, but all programs not in the BCS and even some in the BCS use these fee sources to fund their athletic programs (Berkowitz & Upton, 2011). This is based on the idea that the funneling of money into an athletic department for the purpose of generating a profit is a poor business decision and economically not feasible nor realistic (Denhart & Ridpath, 2011; Vedder, et al., 2010). According to the Transylvania University economist Dan Fulks in 2010, just 14 of the 120 FBS athletics programs and none of the 97 schools in Division I reported making money from athletics, with median losses of more than $2.8 million (NCAA report, 2010; NCAA, 2008). MAC school budgets range from almost $28 million at Temple University to just over $10 million at Eastern Michigan University (Examining the University Bill, 2011). This budget is dwarfed by the $100 million plus budgets from the likes of the University of Texas and Ohio State University, institutions that Mid-American Conference teams compete with directly in NCAA Division I (Carrera, 2007; Dexheimer, 2007). When these major athletic program budgets continue to grow at rates on average of 13% yearly over the past decade, the smaller programs are left behind, but they are still desperately trying to compete at the same level (Dexheimer, 2007; Vedder, et al., 2009). These factors contribute to what is known as the "arms race" in intercollegiate athletics (Frank, 2004). In other words, the larger schools' spending on facilities, operations, and coaching staffs grows upward, peer institutions and smaller schools feel compelled to try to match expenditures to remain competitive. However, the reality of remaining competitive is largely something that will not happen, yet schools continue to spend, often beyond it means (Grant, n.d.; Ridpath et al., 2008).

NCAA Financial Detail and Summary

Based on the NCAA's projected revenues and expenses data, the NCAA's estimated revenue for each year from 2007-10 is on average $564 million (NCAA, 2006; NCAA 2007a; NCAA 2008; Vedder, et al., 2009). Of the $564 million in annual revenue, $508 million was generated from Division I television and marketing deals. Another $44 million comes from NCAA championships. Division I expenditures total $390 million, or 69% of all expenses. D-II and III expenditures total on average $24.7 and $17.9 million in expenses respectively. A large portion of the revenue goes to fund championships in all three divisions and national office operations. In 2010, the NCAA signed a new contract with CBS Sports, Turner Sports, and TruTV which totals 14-year, $10.8 billion dollars which now adds up to almost $700 million dollars annually in total revenue for the entire NCAA (Sandomir & Thamel, 2010).

The Knight Commission Report entitled, "A Call to Action," states in 2001 each win in the NCAA tournament had an overall value of $780,000 for a school (KCIA, 2001). The money used to pay for the money units which contribute to the overall value is generated from the approximated $350 - $760 million the NCAA receives yearly over the life of the previous 11-year $6 billion deal with CBS for the broadcast rights to the men's NCAA basketball tournament (Zimbalist, 2008; Glenn, 2007). A similar 11-year contract with ESPN to broadcast all of the other 20 NCAA championships besides football and basketball is worth $200 million, or $18.2 million per year (Glenn, 2007).

For CBS, the profitable part of this venture comes in the advertising revenue that is generated throughout the 67 televised games of the tournament (Sandomir & Thamel, 2010; Spence, 2005). TNS Media Intelligence analyzes the data of television sponsorships including those of in the NCAA men's basketball tournament and BCS bowl games. According to their analysis, the advertising revenue earned from the NCAA men's basketball tournament reached $497 million, generating a total of $2.73 billion in revenue since 2000 (TNS Media Intelligence, 2007). The $497 million from 2007 surpasses total revenue for the NBA, NFL, and MLB

postseason tournaments. This number accounts for 75% of the advertising revenue generated by men's college basketball for the entire season. This ratio is essentially inverse for college football's revenue generation as 78% of football's revenue generation comes from regular season play. Overall, in the 2005-2006 season basketball generated $662 million in total advertisement sales while football generated $506 million in total advertising sales (TNS Media Intelligence, 2007).

Beyond the NCAA's tournament television contract, many conferences also have exclusive television deals (Ourand & Smith, 2008). Ourand and Smith explain that most BCS conferences received around $50 million or more for their 2005-2006 television contracts in football and basketball. The largest deal by far is the 25 year deal the Big Ten Conference has with Fox Sports where the Big Ten is projected to receive $2.8 billion over the life of the deal (Ourand & Smith, 2008). The newly configured Big 12 conference just inked a 13 year, 90 million dollar television deal with Fox Sports (Staples, 2011).

Universities utilize many other means for generating revenue. Ohio State University signed a $40 million dollar contract for the naming rights to its basketball arena while the University of Minnesota garnered $35 million to name its new $288 million dollar football stadium (Wolf, 2007). Many universities do choose to retain the traditional stadium names rather than gaining corporate sponsorship. Some suggest future trends will follow the professional model of licensing the naming of stadium entrances (Walker, 2007). Other licensing ventures include collegiate apparel which is a booming $3.5 billion industry thanks in part to the 29 million college alumni (Barnidge, 2008). The top apparel revenue generator in the 2005-2006 season was the University of Texas as they made $8.2 million in revenue in the wake of their football national championship victory (Barnidge, 2008). Universities generate money through licensing the ability to sell apparel featuring the school's trademarks. The fee structure includes a flat fee charged up front to stores and royalty fees charged for each item sold (Barnidge, 2008; Mullin, Hardy & Sutton, 2007). While only a select few universities make the big bucks, the enticing Cinderella stories that

happen yearly have universities vying for their chance at the big-time. A narrowing margin for error leaves universities willing to do just about anything to get and stay at the top (Associated Press, 2006; Munoz & O'Donnell, 2007; Tublitz, 2008).

Data from the NCAA released in 2007 showed that only 22 of 313 D-I athletics programs were profitable after removing institutional support (Knight Commission on Intercollegiate Athletics [KCIA], 2007b). Goff opposed this sort of data stating that expenses incurred are inflated with accounting principles and that actually only 10% of schools are unprofitable. Skousen also claimed that many football programs can be profitable by properly reassigning indirect benefits to properly assess the contribution that a large scale football program creates (Skousen, 1988).

One significant contribution to the sustainability of athletic programs is the student general fee which is part of overall institutional support. Student fee aid is a portion of tuition from every student that is divided up amongst university programs. This amount of institutional support has been steadily rising, and currently averages $2.5 million for the Football Bowl Subdivision. This amount is under 10% of the average institutional support versus revenue generated (KCIA, 2007a; Vedder, et al., 2009). Revenues are generated mostly through ticket sales, then alumni contributions, then conference distributions. On the expense side, expenses are generated mostly from salaries, then grants-in-aid, and then facility usages and maintenance expenses.

The NCAA states that approximately 95% of revenues are returned back to institutions in the form of services and direct payments (NCAA, n.d.). Some of these direct payments are based on sports sponsorship and the number of grants-in-aid given. For every sport over 13 sponsored by a school, the NCAA gives the school a direct payment of $22,000. There are also direct payments from the NCAA based on the number of grants-in-aid awarded by the school. These payments are allotted through a point based system. Moving in 50 scholarship increments, an institution receives 1 point for each of the first 50 scholarship it offers, 2 points for each of the next 50 scholarship, 10 points for scholarship 101-150, and 20 points per

scholarships awarded above 150. Each point results in a direct payment of $214 (Brown, 2005).

The reason that so much effort is being put into developing and maintaining successful athletic programs is that the high stakes can result in huge rewards (Frank, 2004). Each year the Bowl Championship Series gives out over $142 million to BCS bowl game participants (NCAA, 2007a). This is a 13% increase from '05-'06 which vastly outweighs the 4% average growth. The NCAA also gives payouts to teams competing in the NCAA basketball tournament. The "money units" accumulate over a six year period resulting in a check to the conference at the end of the period. The amount is based on the number of appearances by a conference's teams and the number of rounds they advance through. A money unit is attributed to a team for each round of the tournament they play in; these units are valued between $150,000 - $175,000 (Glenn, 2007).

What is seen in the current state of NCAA athletics is a complicated, multi-billion dollar industry where winners are receiving massive compensation for their success, but in all likelihood are spending more. More and more universities are sacrificing other parts of their athletic departments to compete in the same spending arenas with other DI powerhouse football and basketball programs. One such example is Rutgers who dropped six sports to free up $800,000 for the athletic program in 2006. Not surprisingly, the football team saw the greatest budgeting increase the following year. Though football for them continues to be a money losing operation, the university allows continued spending increases so that football can be the "front porch for the university" (Associated Press, 2006; Berkowitz & Upton, 2011; Suggs, 2003).

Zimbalist reflects on this situation by saying that the possibility for success at Rutgers is there because of their geographic location and lack of competition in the area (only major collegiate football team in New York/ New Jersey area). A lack of success by the football team Zimbalist says will drain other sports (Associated Press, 2006). Even though Rutgers is geographically located to make a leap in football status with the hopes of creating a huge revenue source that to really compete at the same level as Michigan and Ohio State and even Louisville, they're really going to have to spend a

large amount of money to even come close to accomplishing that goal (Associated Press, 2006).

The University of Alabama's hiring of Nick Saban as its head football coach illustrates the escalating costs associated with running Division I football programs. This $4 million per year hire is one of the largest in college athletics and shows how much universities are willing to spend to be successful. 10% of the entire athletics department's $70 million budget is spent on football coaches' salaries alone. In giving reasoning for such a large expenditure, athletic director Mal Moore says that Alabama is "able to do this, and I'm glad that we could" (Estes, 2007). Such actions are the basis for the claims of an ongoing arms race that has left many institutions struggling to keep up. Currently smaller divisions such as the Mid-American Conference have coaches' salaries equating to 12% of their budgets compared to the 4% spent by other large DI institutions.

Women's sports continue to be underrepresented as female undergraduates make up 55.8% of the collegiate population while only 41.7% of athlete populations are represented by female student-athletes (Koller, 2010). Interestingly enough, these numbers had been growing throughout the 90's during the early stages of Title IX implementation, but have stalled since the year 2000 (Cheslock, 2007). We cannot be sure exactly why these numbers have slowed, but the increasing allegations of an arms race have occurred during this period of stalled growth.

A report by the NCAA was conducted to review athletic expenditures and revenues. It generated conclusions that support the idea that spending in intercollegiate athletics is out of control. The period of examination was from 2004-2006, a time in which the NCAA asked respondents to make changes to their financial reporting process (NCAA, 2008). Specific changes included review of submitted data by a third party, dividing revenue into those "generated" and those "allocated," and reporting revenues without the inclusion of allocated revenues (Berkowitz, 2008).

The major contribution made through this research was the adjusted accounting measures made to establish what revenue was generated or allocated. The revenue reported in previous years was a

single sum of both sources of revenue. This single sum was misleading because allocated revenues, such as student fees or general fund monies, come directly from the university and not from outside sources. These allocated funds can be adjusted upward to make an athletic department appear self-sustaining, when in fact they are pulling money from educational programs to fund themselves. As Stan Nosek, vice chancellor of administration at the University of California-Davis stated "when some programs require more institutional support, it takes away from the core mission [of a university]" (Berkowitz, 2008, p. 1).

On average, D I-FBS institutions received 19% of revenues from allocated sources in 2004. This number grew to 26% only two years later (Berkowitz, 2008). Zimbalist found flaws in the NCAA's data collection process, as the new process of reporting of revenues still included alumni contributions amid findings that contributions to sport are often associated with decreases in general giving to the university. Zimbalist also mentioned that the improved allocations of indirect expenses to the athletic program were "still not comprehensive." Zimbalist's example illustrated that if a university president were to spend 15% on athletics, 15% of their salary should be paid by athletics (Zimbalist, 2008). With these increasingly transparent measures in place it was found that the 19 profit generating schools for 2005-2006 averaged a surplus of $4.29 million, while the other 100 programs lost on average $8.92 million (Berkowitz, 2008). The average gap of $13.21 million between those in surplus and those in deficit doubled since the 2003-2004 time period (Zimbalist, 2008). To make matters worse, a Jonathan and Peter Orzag study found that the average cost of athletic facilities is an additional $24 million. This capital expense is not included with operating expense numbers (Zimbalist, 2008). The increasingly apparent struggles athletic departments are facing left Zimbalist to finish by saying "The day of reckoning is coming. It is time for college sports to sober up (Zimbalist, 2008, p. 1)."

Both Knight Commission reports assessed the problems associated with academic misconduct and the building arms race. In the 2001 report stated at more than 970 NCAA member schools, generated $3 billion a year, but were spending $4.1 billion in that

same period (KCIA, 2001). More recent reports were even more sobering that at best for every one dollar made was at least a dollar spent (Litan, et al., 2003). The idea behind the arms race is that universities feel they must have the best facilities or spend the most on operating their programs to attract the best recruits. Once a rival university builds something better or spends more on an athlete, all peer universities feel the need to spend more to cover the new gap. This attempt to maintain the best programs leaves smaller, less financially viable athletic programs losing money. Litan, et al. (2003) found no evidence of an arms race, but their research did not include capital expenditures which are a main component of such a race.

Success and Donations

Athletic success has often been considered a catalyst for alumni donations. Common sense might seem to support this idea on the basis that alumni will give back if a team is doing well and has high prospects for the future. Recently researchers have been trying to determine if this idea is statistically true (Humphreys & Mondello, 2007; Stinson & Howard, 2007). Factors to consider when looking into donations are the two different kinds of donations, the difference in donation frequency and amount across universities, and the inconsistencies and short comings of information systems that gather donation data.

Restricted and unrestricted giving makes up the two different types of donations received by universities. Restricted donations are specifically earmarked towards a department by the giver. On the other hand, unrestricted donations are given to the university which then divvies up monies across departments. When analyzing donations given to universities, one must remember that there is heterogeneity across universities; this means more prestigious universities produce students that usually have higher salaries and are more likely to be able to give back (Humphreys & Mondello, 2007). Another constraint in the research is that databases can be incomplete or give information with few details. For instance, restricted giving does not have information on which department it was donated to. The Council for Aid to Education estimates that $.22

of every dollar donated is earmarked to athletics. An initial claim that the most current research is looking into is Litan, et al. (2003) claim that increased operating expenditures along with other spending result in an increase in alumni donations.

Stinson and Howard's (2007) results were similar to those from Humphreys and Mondello (2007). Stinson and Howard found that athletic success affected donations for less prestigious schools, but only within athletics. Humphreys and Mondello had similar results that showed only that athletic success increased donations in restricted giving. Both agreed that athletic giving had negative effects on giving of donations to academics. Stinson and Howard found that athletic success had no effect on academic giving and mentioned that trends show that athletics are increasingly the beneficiary of additional giving which likely takes away from academic and other university coffers. Humphreys and Mondello worried more about the sustainability of programs that focused on success because for most it is so difficult to achieve. As they said, in referring to the money generated by current success, "a short-run phenomenon is not a long-run panacea."

Theoretical Framework for Study

With so much focus on the now multi-billion dollar college athletics industry, academic research has begun to focus greater attention on contributing factors to increased spending and allocation of funds. Two significant factors that will be discussed are often not related within academic research, but do have connecting ties. Distributive justice theory analyzes the decision making process that universities follow when deciding how to allocate funds. Other literature analyzes the effects that success has on donations to the university. Distributive Justice is intertwined with university giving because of the need to distribute these funds. In the current state of college athletics, distribution of funds is extremely important especially when considering how many schools are hoping to compete at a high level (Hums & Chelladurai, 2007).

Distributive Justice

Leading the majority of the scholarly work in intercollegiate athletics involving distributive justice is Mahony and Hums who have produced individual and team works. According to concepts of distributive justice, allocation of funds is determined based on three separate criteria which are equity, equality, and need. Hums' research shows that of administrators, women prefer equality distribution while men prefer need as a basis for distribution. Follow up research by Mahony and Breeding in 1999 surveyed students and student-athletes. The study found that equality was rated the highest but revenue sport athletes and males chose need. Mahony and Hums later found that the use of a need based system is usually considered the most fair by athletic directors, and is how most describe their distribution (Mahony, Hums, & Riemer, 2002; 2005). At this point the authors questioned whether the same definition of need was being used by all members of the sample. The formal definition of need can be described as "those with less need more," and need determinations are used when goals include personal growth and the survival of the group (Deutsch, 1975).

Allocations of funds are generally a significant indicator of how an athletic program is run. The goals of the program can usually be determined based on how money is distributed. If need is defined as giving to those that have less, circumstances resulting in a lack of financial resources for certain groups should be reversed by supplementing that program. Instead what we see is further support for revenue sports that already receive much of the distribution. (See Figures 1-4). Mahony et al. (2004) study finds that athletic directors see football as the neediest sport even though it is typically the best funded and is allotted the most resources. This would indicate that a need based model is not followed and that personal growth and survival of the group are not primary objectives. It would also appear that in actuality a corporate model is being used (Mahony et al., 2002; 2005). Running such a model is considered taboo in the non-profit academic world.

This paper analyzes whether the theory of distributive justice is used in funding athletic programs. Is it based on need or is it based on profit potential and alleged benefit to the university, or is need

defined in the mind of those decision makers as the team that ostensibly has the most potential to make a profit and appease the public? This study suggests that need is not one of the primary factors used by athletic departments in the MAC when developing strategies to distribute funding, rather it is greater funding of sports that have potential to generate revenue, but rarely do.

Hypotheses

The research question is divided into two separate examinations. The first approach is to examine the relationship between revenues and expenditures in the sports of football and men's basketball as compared to the athletic success in those programs (Examination 1). The second approach is to examine the relationship between athletic department expenditures and the financial viability of the athletic department (Examination 2). The variables that are produced by the research questions include athletic department revenues and expenditures, athletic success in revenue sports, and financial viability.

The hypothesis ($\mathbf{H_1: \rho_{ES} = 0}$) pertains to Examination 1 and is meant to determine the relationship between athletic expenditures and athletic success. This null hypothesis states that there is no relationship between the amount of money spent on operating revenue sports and the success that that the teams achieve.

Examination 2 is an exploratory look at the growing use of allocated revenues within a small population that will serve as the examination of financial viability via public financial records made available by several Mid American Conference institutions.

Methodology and Analysis of Data

Examination 1

For Examination 1 the revenue and expenditure data were gathered from the Chronicle of Higher Education's Gender Equity database. The information supplied by the Chronicle of Higher Education's Gender Equity database was used to form Database 1. A sample size of 12 was created by using the Mid-American Conference as the population. Athletic success data is gathered from

ESPN's website (ESPN, 2007b). The data were then entered into SPSS 15.0 for analysis. The relationship between expenditures and athletics success was tested using a Pearson Correlation test. This test determined if expenditures are related to actual athletic success. A rejection of the null hypothesis would show that there is significant correlation between the amount of money spent and the resulting athletic success, as defined in this study.

The measure of success was created by ranking winning percentages from in-conference competition. The football and men's basketball standings from the MAC regular season were individually used to develop rankings for each sport. The rankings were developed by first giving the MAC champion a one (1) ranking, in football only the MAC championship game runner-up was given a two (2) ranking, and then proceeding to give subsequent rankings to those with the next highest winning percentages. The number one ranking is important because it means the team will receive either an automatic bid to a bowl game for football or the NCAA tournament for basketball. Other MAC teams may receive a bid in that year, but it is not guaranteed. Teams with tied winning percentages received matching rankings, and the next best team would receive a ranking behind the multiple spots allocated to the teams that tied (e.g. if Ohio University and Bowling Green State University each receive a three ranking, the next best team would receive a 5 ranking). This data was available from the 2002-2003 seasons to the 2005-2006 seasons, allowing for 4 periods of examination. The researchers restricted the data to these years due to the consistency and availability of reports from the institutions that varied in dates and for completeness allowing for a more accurate and consistent assessment.

Examination 2

Due to the lack of specification in items contributing to the revenues and expenditures within the Chronicle of Higher Education's Gender Equity database, which made up Database 1, secondary measures were performed to make more exploratory searches into the true nature of expenditures and revenues within the MAC. Database 2 is comprised of financial information gathered

through Freedom of Information Act (FOIA) requests that were sent to the General Counsels of all MAC schools. The original request asks for specific financial information relating to athletic department expenditures from fiscal year 2000 through the present. Schools within the NCAA complete worksheets and could potentially provide the worksheets used to electronically provide the Equity in Athletic Disclosure Act (EADA) filings that are sent to the Office of Postsecondary Education to be compiled in the EADA database. This is the same database that is the source of data for the Chronicle of Higher Education's Gender Equity database. The filings that must be sent to the Office of Postsecondary Education provide a much deeper look into the expenditures and revenue generation of the department than what ends up being conveyed in the EADA or Chronicle of Higher Education's Gender Equity database. The EADA filings are currently the best data source to use because of the comprehensive information that they provide.

The FOIA data gathering resulted in receiving complete data for the 2000 reporting year through the 2007 reporting year from two schools. The researchers also restricted the data to those years due to the consistency and availability of reports from the institutions. Two other institutions supplied seven periods of usable data, while another provided 5 periods of usable data. A sixth institution provided data that was not in the EADA filing format, but contained data that was able to be used in certain measurements. Due to the varying levels of usable data each measurement includes a note on what the population size was. Also, because the data has various missing values and a small population, median measurements accompany the mean measurements in order to eliminate outliers that could significantly affect the small population size. The exploratory measures that were conducted through Database 2 involved ratio analysis of the available variables.

Results

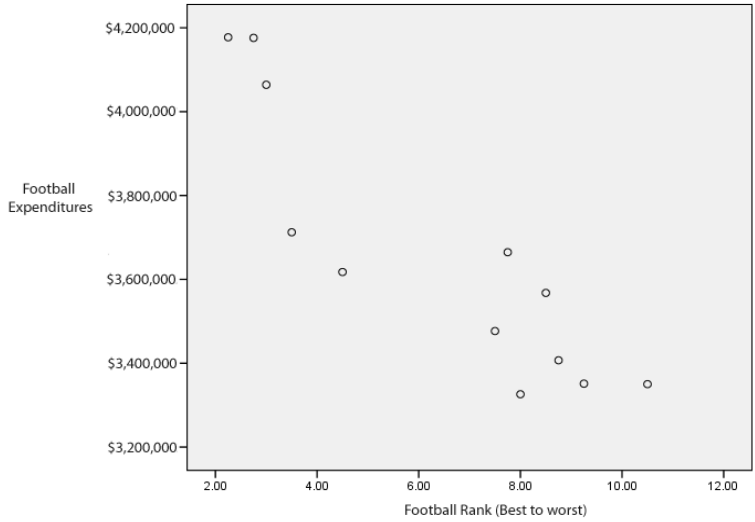
In testing the first hypothesis for each year individually, Examination 1 found that football expenditures from the 2003-2004 season were significantly related, at the .01 level, to the success

attained. The following season had significant correlation to the .05 level. The 2002-2003 season and 2005-2006 seasons found no significant correlation between success and the amount spent to attain it. Although not significant, the 2005-2006 season showed weak tendencies to be correlated with success.

The Pearson Correlation test found that throughout the duration of the testing period football expenditures had a significant relation to the success attained. By spending more, greater success was generated. The scatter plot (Figure 1) shows that a team who spent above $4,000,000 dollars on average continually remained one of the top three most successful teams in the conference. That amount is roughly $350,000 more than what the fourth most successful team spent. There were no findings of a significant relationship between the success of the football teams and revenue generated.

During individual seasons over the four season period, in men's basketball there was no correlation between expenditures and success. As a whole, during the test period success did not significantly relate to expenditures. For the schools measured, there was also no correlation between success and revenue generation. The results suggest that during the assessment period, there was no correlation between individual athletic department expenditure variables (i.e., men's total athletic aid expenditures, men's total recruiting expenditures, or men's total coaching salaries) and the success of the football or basketball team. Note these variables were the overall budgets which include all male sports teams' expenditures. While it would be more helpful to use sport specific expenditures for testing, they were not available. The expenditures though are made up in large part by the revenue sports whose success they were compared against.

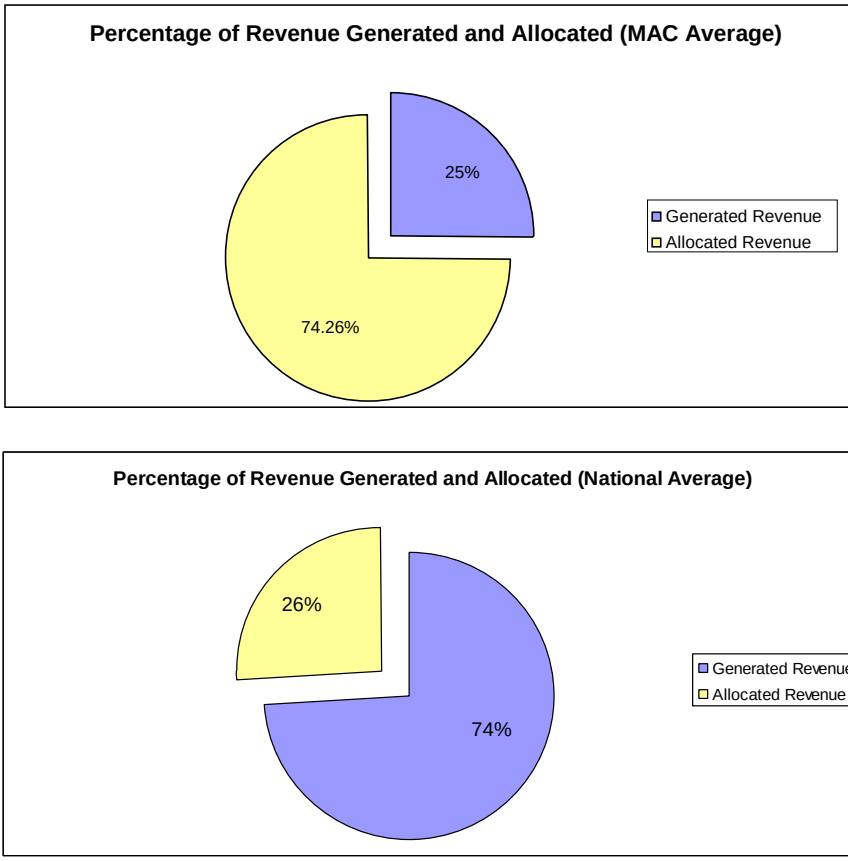
Figure 1-Scatterplot of football expenditures and the correlation with football ranking in the MAC



Testing of the hypothesis showed a rejection of the null hypothesis for the sport of football. Teams with greater success were shown to have greater funding. The lack of specificity in the operating expenditure variables did not allow for complete testing of what operating expenditures most significantly relates to success. For men's basketball, there was no correlation between winning and the amount of money used to fund the competing teams; therefore the null hypothesis as it relates to men's basketball was rejected.

The exploratory data analysis from Examination 2 found increases in several significant areas. Data showed that the average increase of student fees and institutional support was 11.96% per year with a median increase of 7.48% per year (N=6). The combination of student fees and institutional support is what is currently being referred to as allocated revenue. Another measure from this data set found that throughout the sample period 72.52% of all revenues were generated through allocated revenues, the median value was 72.05% (N=5). In the 2003-2004 reporting year the five institutions in the sample averaged 74.26% of expenses being paid by allocated revenue. In that same reporting year the national average was 26% (Figure 2).

Figure 2-Percentage of Revenue-Generated and Allocated, MAC v. National Average



*Reporting year 2003-2004

In looking at increases in athletic department expenditures against increases in total university expenditures it was found that athletic department expenditures increased by an average of 16.33%, median of 10.7%, while total university expenditures averaged increases of 2.99%, median of 3.5% (N= 4 for both measures). On a yearly basis, the deficit created when allocated revenues are not included in total revenue figures is growing at an average rate of 16.01% (Figure 3). The average deficit for the 2005-2006 reporting year was $12,674,475 which is 42% above the 2005-2006 national

average of $8,920,000 (Figure 4). It should be noted that the MAC is already included in that national average, and that it can be assumed that the MAC members' inclusion already skews the average upward.

Figure 3-Average Deficit Growth

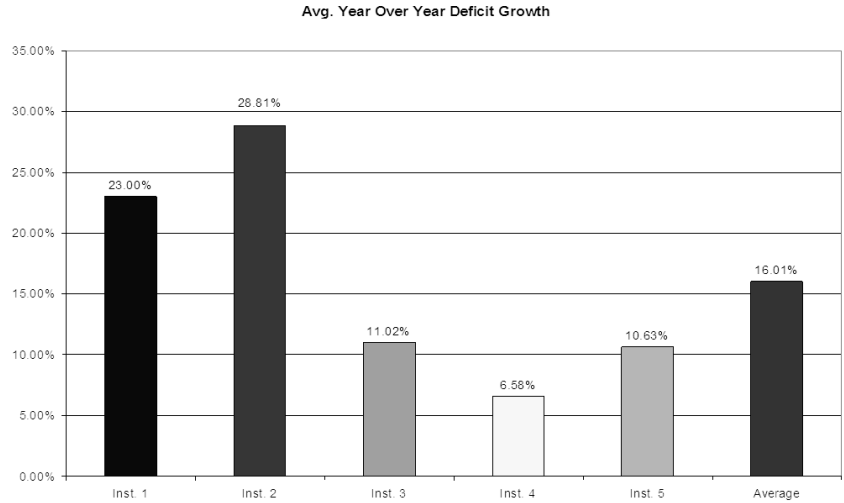
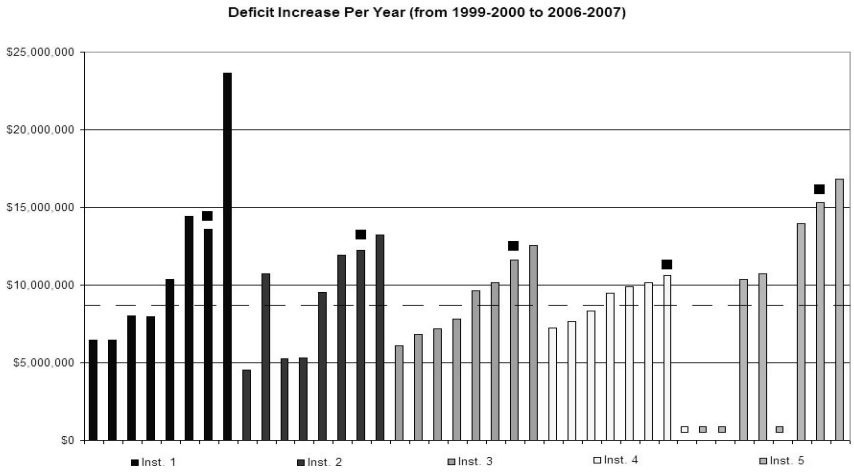


Figure 4-MAC Deficit Increase per year



*Bars with black boxes above them denote the 2005-2006 reporting year; the dashed trend line denotes the $8.92 million average deficit produced by the 100 universities whose athletic departments ran deficits during the 2005-2006 reporting year.

Skousen (1988) and Goff (2000) have spoken out about the current measuring of total expenditures stating that it is not accurate because athletic aid is a non-cash expense. By taking athletic aid out of the total expenses the five institutions when taken together still have an average deficit of over $9 million dollars per year.

Conclusions and Recommendations

The NCAA has increased transparency starting with its 2004-2006 Revenues and Expenses of Division I Intercollegiate Athletics Programs Report, but it is not enough. The Office of Postsecondary Education needs to make all of this data available to the public through their EADA database while the NCAA increases transparency. The select summaries of revenues and expenditures are not sufficient and inconsistent in format.

The NCAA also needs to continue its standardization of reporting measures. The lack of standardization in the past is a significant contributor to the limitations of this study. Instead of taking small, incremental steps towards standardization, the NCAA should make a large investment in creating acceptable reporting principles in the way that public corporations have standardized their accounting procedures. Such a change could be expensive and difficult for NCAA member institutions, but the affect would be the establishment of accountability for university financial reporting measures. The standardization would also provide transparency to the real expenses of intercollegiate athletics. Without government intervention, which seems to have become a recent catalyst for change in American athletics, it is the responsibility of the NCAA to use their power and be the one taking steps towards reformation. NCAA reformists should make increased transparency a primary factor in their suggestions for changes in the intercollegiate athletics system. Increased transparency will be a key factor in developing research that can assess the true cost of intercollegiate athletics.

Based on the review of financial data during the specified time period, MAC schools substantially increased athletics expenditures and the annual athletics percentage increase (16%) far outpaced the increase in overall university expenditures (3%). Substantial athletics increases on a yearly basis should be cause for concern at universities. Previously athletics budgets were masked

with allocated revenues which hid the problem. Through this examination a better picture of revenues and expenditures is disclosed. When the athletics budget of these programs is increasing at a higher rate annually compared to the academic budget of these institutions, the alarm should sound. This is clearly not sustainable long term. The core mission of a university is to provide education, and in recent years schools have been spending at least $10 million dollars on "ancillary/auxiliary" programs such as athletics. Certainly there are many benefits to intercollegiate athletics, but at what cost? The rate at which these expenditures are increasing is alarming and diminishing the financial viability of MAC athletic departments. The institutions simply will not be able to sustain such increases in the long term.

Examination 1 showed that the cost of success for football was in excess of $4,000,000 of operating expenditures per year. This was an average over a four year period, so it is conceivable that this figure is currently much higher when factoring in the substantial increases in expenditures in recent years. Often the reasoning behind increased funding to these programs is the need to succeed, and the translation of that success into revenue generation in football and men's basketball. This study found that success does not translate into revenue generation. It is difficult to say why a relationship between basketball expenditures and success did not hold as it did for football. The limited time period in which the study was conducted could have played a role. A longer period of study could possibly show that greater expenditures result in more success. Also, the nature of competition in the MAC could have played a role. In looking at different conferences better known for basketball prestige, the relationship between expenditures and success may be more apparent.

The finding that success does not translate into increased revenue generation in the MAC is very important as this is often a reason for increased spending in these sports. This idea was discussed extensively in previous sections with examples of the successful outliers like Gonzaga and Boise State. The two schools' ability to overcome their mid-major status and excel on a national stage is something that many other mid-majors are trying to emulate. Should a school reach that status, they are able to enter into high

paying bowl games or progress through the NCAA tournament and earn revenue associated with that progression. The ancillary benefits of increased exposure for the university and the possibility of increases in enrollment are also highly touted as major benefits to the expenditures made because of athletics, but not significantly supported by empirical research, including this study. Some university leaders justify the increase in dollars to athletics and the elimination of other sports teams by saying that the university is using these major sports as the "front porch" of the university. The "front porch" mentality seems to mean that sports are the easiest way to nationally advertise and draw attention to the school. Based on the data collected, it appears MAC institutions as a whole are spending over $100 million dollars a year on non-core programs that have been essentially justified as advertising expense. Regarding the front porch concept, more research is needed to better understand the impact and degree that differing variables have in regard to media exposure and national attention. Front porch concepts aside, based on the results of this current study, the data suggest that the success that MAC schools may achieve does not result in revenue to match what has been spent.

In Examination 2, the difference between the median and mean shows a great deal of variance in allocated revenues in MAC schools. The variance shows how unsure many schools might be as to what their total expenditures will be for a given year. One school provided a variance analysis that described exactly how such instability could occur. In that given year the university received a bid to a minor football bowl game which they accepted. Even though the school earned $300,000 for their appearance in the bowl game, the school lost hundreds of thousands of dollars more than that through their participation. The charter flight that the team took to the game cost $162,000 alone; the school also spent $81,000 on "championship items" (Denhart & Ridpath, 2011). Other helpful insights into athletic department operations were provided through this report. For instance, a debt from the lowering of the football field several years prior resulted in a $477,000 charge in 2007. The university's explanation for this charge was that donations expected to pay for the capital project had not materialized. It is interesting that donations to a football team that just made it to a bowl game

would not materialize; it would appear this situation opposes Stinson and Howard's (2007) findings that success results in greater restricted giving at less prestigious academic institutions. Another insightful piece of information supplied by the report became a prime example of creative accounting in intercollegiate athletics. The document showed that part of the proceeds of an internet service provider contract were placed in ticket sales revenue so that the program could meet the NCAA's 15,000 sold tickets requirement for the annual football certification process. Much like Zimbalist talked about, the financial data provided by institutions requires greater scrutiny. Until greater transparency is available, these numbers must be used with caution.

MAC schools have been spending more to remain competitive within the conference. Is this justified? Analysis of the data showed this to be true for football team expenditures. Most of the money used to fund these sports is coming directly out of the pocket of students, and the amount being taken continues to rise at an alarming rate. With economic hardships causing many states to make cuts to education spending, it becomes increasingly harder to justify such spending on athletic programs at all NCAA member institutions (Lav & Hudgins, 2008). With such monumental price tags, the idea of developing national prominence through sporting program should be revisited. Only the most highly funded programs and the luckiest mid-majors are able to contend for a spotlight that has proven may provide short term benefits to enrollment, if any benefit at all, and exposure for a university. University leaders (presidents, athletic directors, and trustees) are supporting such plans to fuel the cycle of athletic expense increases with tax payers' dollars and students' tuition fees. Is this truly in the best interest of the students, the taxpayers, and the institution? The authors believe that in light of the current economic climate, a need to revisit institutional priorities is warranted.

Limitations

The limitations of this research are primarily based on the accuracy and availability of the data. The Chronicle of Higher Education's Gender Equity database took its information from EADA reports which were filled out by schools with varying

accounting procedures. The difference in accounting procedures has had researchers speculate that many of the figures are not entirely accurate. Zimbalist once stated considering the purposes of discerning the true financial status of I-A athletic programs, the numbers and conclusions from the EADA reports were unenlightening (Zimbalist, 2008). This reference does not necessary mean that the data is totally useless; it is more likely Zimbalist is referring to universities tendencies to not fully record all expenditures properly.

The difference in accounting measures at universities cause certain expenditures to be allocated differently. This means that some expenditures were sizably larger at one institution versus another. In other cases a university appeared to switch accounting measures from one year to the next. In these cases a certain line item would be blank one year, then in the following year it would suddenly be a large expenditure. Such switches in accounting measures created gaps in the data. Other gaps in the data were formed, specifically in Examination 2, because universities simply failed to send the correct reports. On occasion a university would send data from reporting years 2003, 2005, and 2006, but skip reporting year 2004. This hindered analysis of the already limited population size in Examination 2.

Another limitation is the subjective success measure given to football and men's basketball in Examination 1. Due to tied records, many universities received matching rankings. The in-conference schedule for the two sports were limited, for football the teams may only play 6 or 7 in-conference games. This greatly increases the chance of having multiple teams tying with the same record. In order to help separate teams, the 1 and 2 rankings were given to those football teams that went to the MAC Championship game. This helped to validate the top ranked football teams, but left the middle and lower rankings more questionable.

The limited population in Examination 1 may have hindered the ability to establish a correlation in certain areas. Had the sample size been bigger and the testing period been longer, it may have been possible to find a significant correlation between variables such as basketball success and expenditures. The MAC does not contain any perennial basketball powerhouses so if future researchers add other

schools to the population size, they should be similar mid-major programs.

Future Research

As the use of the NCAA's new accounting standards allows for more years of data to be compiled, useful year to year comparisons can be made. This sort of comparison will allow for the validation or rejection of what was found through this research. With the help of this more useful data, greater in-depth analysis will be possible and give increased insight into the true stability of intercollegiate athletic departments. Further research could use the approach that this research took in separately analyzing conferences. Analyzing DI-A as a single group can be misleading due to the vast differences between the upper and lower limits of the population. In order to properly conduct future research, uniform financial reports should be used. The requesting of one specific report from each school will help to ensure the credibility of the data and at least somewhat similar accounting measures.

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