

NCAA VIOLATIONS AND INSTITUTIONAL SELF-SANCTIONS: ASSESSING THE IMPACT
ON ALUMNI CHARITABLE CONTRIBUTIONS

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The growing commercialism within Division I big-time athletics has raised the financial stakes for universities, as successful athletic programs benefit from increased opportunities for financial gain. This has contributed to a pervasive “win culture” that drives institutions to seek competitive advantages, and as a side effect, NCAA rule violations have become incentivized. Programs whose infractions go unnoticed may benefit from the competitive advantage gained, but for programs investigated by the NCAA, the financial penalties incurred may far outweigh the potential revenues from undetected violations. The purpose of this study was to address institutional self-sanctions as an organizational behavior in response to NCAA major infractions and the impact of self-sanctioning on alumni charitable giving. Through the use of neo-institutional and resource dependence theories, this study aimed to further examine the role of institutional self-sanctions as a crisis management strategy in containing financial fallout of athletic scandal. While researchers have addressed scandal and alumni charitable giving in relation to athletics and institutional self-sanctions, respectively, no research exists linking the two bodies of literature. This study employed a two-way fixed effects analysis of 10 years of panel data to address the effect of key variables on alumni charitable giving. Analysis results indicated no significant relationship between institutional self-sanctions and alumni charitable giving. However, alumni charitable giving was mitigated by institutional endowment per FTE, suggesting that larger scale financial structures of an institution serve as the best predictor for alumni charitable giving during athletic scandal.

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CHAPTER 1

INTRODUCTION

In October 1986, National Collegiate Athletic Association (NCAA) investigators received statements from a former Southern Methodist University (SMU) football player and his family regarding illegal “pay-for-play” recruiting practices that involved players, boosters, and university administration (National Collegiate Athletic Association [NCAA], 1987). This report, and the subsequent investigation, became the lynchpin for the NCAA probe that resulted in the “death penalty,” which remains perhaps the most well-known punishment in the history of intercollegiate athletics. However, the issues leading up to the final investigation into the SMU football program were not isolated, but rather represented a string of repeat offenses that occurred over a two-decade period. The NCAA investigated and sanctioned SMU four times between 1972 and 1987 for inappropriate recruitment practices, failure to monitor the athletic program, and a lack of institutional control. Combined, these infractions resulted in numerous sanctions including probation, bans on television exposure and post-season play, as well as limitations on recruitment.

On February 25, 1987, the NCAA implemented the harshest penalties on record to not only address the complete lack of institutional control as evidenced by the widespread cover-up by SMU administrators, board members, and the former governor of Texas, but to also issue a warning to other universities during a decade marred by intercollegiate athletic scandal (Dodd, 2017; Thelin, 1996). In addition to reducing scholarships, banning booster group affiliations with the institution, and prohibiting off-campus recruiting, the NCAA cancelled the 1987 football season, a ban that the university extended to include the 1988 season. SMU also faced

a three-year probation and a two-year ban on post-season play and live television exposure, which effectively killed the football program at the institution. While the investigation, sanctions, and immediate public and media fall-out created short-term repercussions, as the institution lost \$2 million in annual generated revenues and \$700,000 in annual television rights, the long-term effects of a disassembled football team still linger today (Bedell, 1987; Dodd, 2017; Thelin, 1996). The institution struggled athletically for a twenty-year period following the scandal and subsequent death penalty and only began to make progress toward a competitive, viable football program within the last seven years. Despite positive strides in the last decade, the public image and perceptions of the institution and their athletic program remains tainted by the scandal-laden behavior that occurred thirty years ago.

Statement of the Problem

Although the SMU case represents one of the most egregious series of institutional NCAA rule violations, similar issues continue to plague big-time athletic programs. Between 1975 and 2015, the NCAA investigated and sanctioned 343 reports of major infractions at Division I institutions that sponsor teams within the highest competitive tier in intercollegiate athletics (NCAA, 2017a). Of these infractions, 82% occurred within Division I FBS football and men's basketball programs. In their investigation into the state of ethics in athletic programs, The Knight Commission on Intercollegiate Athletics (1991) stated, "these patterns are grounded in institutional indifference, presidential neglect, and the growing commercialization of sport combined with the urge to win at all costs" (p. 20). Rather than functioning solely as a byproduct of poor management of athletic teams, NCAA violations and scandals appear to be

indicative of larger systemic issues with regard to institutional oversight in an environment riddled by high standards for competition for increasingly high-stakes financial gains.

Researchers (Bailey & Littleton, 1991; Callahan, 2004; Duderstadt, 2000; Knight Commission on Intercollegiate Athletics, 1991; Sigelman & Bookheimer, 1983; Sigelman & Carter, 1979; Sperber, 1990; Staudohar & Zepel, 2004) have underscored the pervasive “win-culture” and commercialization associated with big-time athletics, particularly Football Bowl Subdivision (FBS) football and Division I men’s basketball programs. For these institutions, successful athletic programs yield the potential for substantial financial profitability via media contracts, ticket sales, and post-season conference and bowl payouts in addition to non-financial benefits including greater visibility and enhanced prestige. Successful teams may see increased ticket sales and profits from post-season tournament and bowl wins at the institutional level as well as part of their affiliated conference membership, which may place pressure on both teams and institutions to build successful athletic programs or elevate current successes. Coaching staff also face pressures related to the “win-culture,” as most employment contracts are built upon incentivized systems whereby coaches earn additional bonuses for winning seasons, conference championships, bowl or tournament wins, and national titles. Combined with institutional benefits of success, coaching incentives further the competitive, high-stakes culture within big time intercollegiate athletics (Cullen, Latessa, & Byrne, 1990; Holmes, 2011).

While program eligibility hinges on a university’s ability to adhere to NCAA policies and procedures, the “win-culture” of big-time athletics creates a temptation to violate regulations in order to gain a competitive advantage (Knight Commission on Intercollegiate Athletics, 1991;

Sperber, 1990; Thelin, 1996). This creates a fraught situation in that institutions may choose to violate rules in order to win and increase their financial stakes, however, if caught, they face financial ramifications that may impede immediate and future financial gains. For administrators at violating institutions, mitigation of potential financial loss becomes paramount. In the midst of athletic misconduct and subsequent investigations, administration utilization of institutional self-sanctions has emerged as a method by which universities respond to major infractions instigations. By implementing institutionally based punitive sanctions prior to official sanctioning by the NCAA, researchers (Winfrey and McCluskey, 2008) determined that institutions decrease the financial severity of NCAA penalties, thus positioning self-sanctioning institutions in a more favorable fiscal position than non-sanctioning universities. While management of NCAA punishments aids universities in curbing threats to recruiting, television exposure, and post-season play, the impact of scandal on university constituencies, particularly alumni, creates an additional threat to institutional resources from a financial perspective.

Purpose of Research

This study is an econometric analysis of the impact of institutional self-sanctioning in the wake of NCAA violations. A limited body of literature related to NCAA major infractions and subsequent sanctioning exists and emphasis ranges from the financial ramifications of NCAA sanctions to appropriate sanctioning processes. However, notably absent is a focus on the impact of said sanctions on the university community. Athletic programs serve as the “front porch” of a university in that the accessibility and visibility of a program allow for external

stakeholders and alumni to maintain contact with an institution in a manner in which educational departments and other functional areas lack (Duderstadt, 2000; Thelin, 1996; Toma, 1999, 2003). In addition, athletic programs may function as a surrogate indicator for universities, as the visibility and performance of athletic programs becomes a marker of perceived quality for other aspects of the university (Roy, Harmon, & Graeff, 2004). Thus, the negative image associated with NCAA investigations and athletic misconduct may affect alumni support in the form of charitable giving to an institution. Alumni populations have emerged as valuable resources for athletic departments, with contributions accounting for up to a quarter of athletic generated revenues (NCAA, 2016d), as well their respective institutions. With regard to charitable giving to colleges and universities, alumni contributions in 2016 represented the second largest source of giving at roughly \$10 billion, only trailing giving by corporate foundations (CAE, 2017a).

Winfrey and McCluskey (2008) suggested that institutional self-sanctions in response to NCAA violations might assist college and university administrators in managing public perception in the wake of NCAA violations from both short and long-term perspectives. However, this assertion remains untested empirically. Given the increased emphasis on institutional advancement and alumni charitable giving within higher education, in addition to the role of athletics in developing alumni affinity and involvement at an institutional level, this population of stakeholders may warrant special consideration with regard to the effects of university management of NCAA violations.

Significance of Study

This study will provide a more robust understanding of the impact of institutional responses to NCAA violations. While Winfree and McCluskey (2008) indicated that self-sanctions have become a regular practice among NCAA affiliated institutions, relatively little is known about how this form of institutional response contributes to the financial management of athletic violations beyond mitigating the impact of NCAA sanctions. Thus, this study will expand higher education literature on athletics, specifically in relation to the link between athletics, advancement, and fundraising. Pragmatically, the implications from further study of the role of self-sanctions in managing NCAA crisis stand to benefit both institutional advancement teams and university administrators. Given the link between alumni and athletic programs, negative athletic exposure associated with NCAA major infractions may contribute to decreased financial support with regard to athletic restricted gifts and total university giving. By gaining a better understanding of the financial impact of self-sanctions on alumni giving, study findings may inform administrators and university presidents of the bottom-line effects of institutional decision-making.

This study utilizes the context of intercollegiate athletics as a window to better conceptualize the how higher education institutions adapt behavior and decision-making processes during times of perceived crisis. As such, this approach in framing NCAA scandal broadens theoretical discussions of intercollegiate athletics in addition to providing empirical investigation into the efficacy of self-sanctioning practices that bear pragmatic application with regard to institutional policy development and enactment. At the most fundamental level, NCAA major violations represent a threat to institutional resource streams. In the wake of

decreased state appropriations, particularly following the 2000 recession, many colleges and universities have sought to expand ties to diverse sources of revenue in order to combat the increased scarcity of resources for institutional funding (Archibald & Feldman, 2011; Cheslock & Gianneschi, 2008; Drezner, 2006; Weisbrod, Ballou & Asch, 2008). For public institutions, the lower levels of state subsidies shifted the cost-sharing paradigm and colleges and universities are now relying on tuition dollars and external donations, among other means, to offset the changes in appropriations (Cheslock & Gianneschi, 2008; Weisbrod et al., 2008). Through the implementation of institutional self-sanctions, university administrators may attempt to stabilize ties to alumni as an institutional resource, thereby reducing the organizational threat to a key revenue stream. Should institutional self-sanctions impact alumni giving from either a short or long-term perspective, an increased knowledge of the economic function of self-sanctions would allow institutional administrators may be able to best utilize self-sanctions to anticipate, strategically account for, and manage potential decreased resource flow from the alumni base.

In the event that institutional self-sanctions bear no significant impact on the sustainment of resources in the form of alumni charitable contributions, it is important to understand the crisis management practice as a function of industry-based norms. Researchers (Winfrey & McCluskey, 2008) indicated that institutional self-sanctions serve a normative purpose during scandal in that roughly two-thirds of colleges and universities engage in the practice during NCAA investigations. The mass acceptance of self-sanctions as the most appropriate institutional response to manage fallout post-apprehension may suggest the practice is a peer-dictated requirement for institutions managing athletic scandals. Higher

education constitutes an organizational field with prescribed behaviors and standards that members must abide by in order to maintain legitimacy, as deviation from said norms results in a loss of prestige that negatively affects institutional positioning in relation to other universities (DiMaggio & Powell, 1983; Leslie, Slaughter, Taylor, & Zhang, 2012; Powell & DiMaggio, 1991). However, in aligning organizational behavior with field standards, universities become increasingly similar and decision-making practices tend to align with other institutions, despite the neutral or negative impact on a given university. By enacting self-sanctions, colleges and universities faced with athletic scandals may engage in the practice in order to maintain compliance with field-based standards for crisis response, thus avoiding threats to institutional legitimacy and mitigating potential financial and non-financial losses associated with decreased institutional stature within the organizational field. Understanding institutional self-sanctions during NCAA scandal from this perspective, thus, reveals how affiliation with NCAA Division I athletics informs affects university decision makers' development of institutional policy and practice.

Research Questions

To better ascertain the incidence of major NCAA athletic infractions at Division I institutions, the relationship between institutional self-sanctions and alumni charitable giving, and the function(s) of institutional self-sanctions as an institutional response to NCAA violations and sanctions, this study addressed the following research questions:

- RQ1: What is the incidence of reported NCAA major infractions at Division I universities?

- RQ2: Net of other factors, what is the relationship between institutional self-sanctions in Division I FBS football programs and total alumni charitable giving at institutions investigated for NCAA major infractions?
- RQ3: Net of other factors, what is the relationship between institutional self-sanctions in Division I men's basketball programs and total alumni charitable giving at institutions investigated for NCAA major infractions?

Definitions

- *Alumni*: "Former students (full- or part-time, undergraduate or graduate) who have earned credit toward degrees, certificates, or diplomas offered by the reporting institution" (Council for Aid to Education [CAE], 2015, p. 37).

- *Athletic generated revenue*: These sources of income include funds derived from athletic department functions and programs independent from institutional allocations. Examples include but are not limited to: ticket sales, concessions, merchandise, television contracts, post-season play incentives, and alumni charitable contributions.

- *Division I FBS institutions/football programs*: This NCAA classification, formerly Division IA, represents institutions that sponsor football teams that compete at the highest level within the NCAA, play, at minimum, 60% of games against other FBS schools, and compete in (now defunct) BCS post-season bowl games (NCAA, 2014). FBS designation only applies to football programs; all other institution-sponsored NCAA athletic programs at an FBS institution compete at the Division I level. To qualify for FBS standing, institutions must sponsor at least 16 varsity sports programs, average at least 15,000 in attendance at all home football games once every two years, and have provided, at minimum, 90% of maximum allotted football grants-in-aid over the previous two academic years. In addition, institutions must also issue either 200

athletic grants-in-aid or allot \$4 million on grants-in-aid to student athletes on an annual basis (NCAA, 2015a). Any use of Division I FBS institutions/football programs will be interchangeable and refer to said universities and their football programs.

- *Division I Men's Basketball:* Institutions under this NCAA categorization compete at the highest tier of play for men's basketball.

- *Institutional self-sanctions:* College or universities notified by the NCAA of major infractions allegations may choose to self-impose punishments post-apprehension/self-report of NCAA athletic violation(s), but prior to official NCAA sanctioning.

- *Major infractions:* Categorized by the NCAA as Level I Violations, major infractions represent the most severe policy violations for athletic programs. Infractions under this designation include: lack of institutional control, academic misconduct, failure to comply with NCAA investigations, individual unethical or dishonest conduct, violation by a head coach related to a level 1 violation, pay for play, third-party recruitment violations, intentional NCAA constitution or bylaw violation, and collective Level II and Level III violations that as an aggregate, warrant more severe punishment (NCAA, 2013b; 2017a).

- *Post-season play:* Competitive play occurs beyond the close of athletic program(s) regular season schedules. For FBS Football programs, post-season play in the BCS era consists of BCS-sponsored bowls. Post-season play for Division I men's basketball programs includes invitation to compete in the annual NCAA men's basketball tournament.

Delimitations

For the purposes of this study, analysis was limited to major NCAA violations within

Division I FBS football and Division I men's basketball programs. The NCAA (2016c) indicated these two programs as the top grossing athletic programs across the NCAA Division I classification and are dubbed "revenue sports" for most institutions. Furthermore, these two sports represent the areas of highest incidence of NCAA major rule violations, investigations, and sanctions (NCAA, 2017a). Thus, the high stakes-high reward nature of FBS football and Division I men's basketball combined with the revenue generation warrant consideration of these programs as "big-time" athletics.

Cases considered in this study were limited based on Division I affiliation. Major infraction cases in football were considered for Division I FBS schools only. The FBS, formerly Division I-A, categorizes institutions whose football programs operate in the highest competitive tier within the NCAA. These programs are most apt to generate net revenues and drive rising expenditures relative to less competitive classifications including Division I FCS, Division II, and Division III. Given the high financial investment in FBS football programs, particularly in comparison to FCS designated institutions, the opportunity for revenue generation and exposure all warrant consideration of FBS specific programs. Furthermore, by limiting football cases to FBS, this ensured parity with regard to operating standards within programs, minimum financial resources, and access to post-season play. Cases of major infractions in basketball were limited to Division I classification, as the FBS designation only extends to eligible Division I football programs. A precise sample limited by these parameters allowed for a greater understanding of crisis, organizational processes, and the impact on resources within these types of organizations.

This analysis included major infractions cases between the 2002-2003 and 2012-2013 fiscal years. The lower parameter accounted for the establishment of the BCS system during the 1998-1999 football season. Through this change in post-season play determination, previously ineligible conferences (Big Ten and Pac-10) became eligible for consideration for larger bowls, therefore negating previous anti-trust issues related to bowl monopolies under the Bowl Alliance system. Furthermore, the three-year gap in BCS establishment and the parameters of this study accounted for a “buy-in” period for the newly established BCS system and major alterations to the ranking algorithm. With regard to basketball, the 2001 season marked the inclusion of NCAA Division I basketball tournament “play-in” games, which constituted the first changes in tournament structure in almost fifteen years. This change created a broader scope of post-season play and expanded institutional involvement in the NCAA men’s basketball tournament. Delaying infraction case collection to 2002 accounted for the initial establishment of new tournament policies and procedures surrounding team selection and involvement. Collectively, changes in FBS football and Division I men’s basketball operations warranted exclusion of cases prior to 2002. The 2012-2013 parameter allowed for examination of potential long-term effects of athletic scandal that may have affected alumni giving as a sufficient number of years elapsed between the end parameter and present day to create a temporal gap during which delayed effects of scandal may occur.

The VSE survey collects institutional data from participating colleges and universities based on the previous fiscal year, defined as beginning July 1 and ending June 30 (CAE, 2015). While some institutions operate on alternative fiscal year schedules, the July 1 to June 30 calendar was the most appropriate designation for determining the inclusion/exclusion of

major infractions cases for each year included within the study as primary emphasis of analysis included financial impact of NCAA institutional self-sanctions on charitable giving patterns.

Chapter 2 provides contextual information for better understanding the impact of institutional self-sanctions on alumni charitable giving to colleges and universities. Through consideration of the scope of big-time athletic programs, including the financial and non-financial benefits, NCAA athletic scandal, reform, and institutional response, as well as the theoretical frameworks of resource dependence and neo-institutional theories, institutional self-sanctions emerge as an organizational behavior affected by the broader landscape of intercollegiate athletics and finance.

CHAPTER 2

REVIEW OF LITERATURE

This chapter considers the impact of NCAA Division I FBS football and Division I men's basketball violations and institutional self-sanctions on alumni giving through the inclusion of the following bodies of research: big-time athletic programs, scandal, sanctions and reform, and institutional control and presidential oversight. It then situates the bodies of literature within the theoretical frameworks of resource development and neo-institutionalism. Collectively, these threads of research provide the foundation for conceptualization of the impact of NCAA scandal on institutions and the effect of institutional response in managing potential alumni stakeholder fallout in the wake of organizational crisis.

Big-Time Athletics

With more than 350 member institutions, NCAA Division I colleges and universities boast the largest student bodies, athletic budgets, and student-athlete scholarship awards in intercollegiate athletics (NCAA, 2015a). From indirect benefits such as heightened visibility garnered by teams eligible for post-season football bowl games or participation in the NCAA tournament to the large-scale revenue generation stemming from ticket sales and alumni contributions, programs affiliated with Division I NCAA competition define "big-time athletics." Researchers (Duderstadt, 2000; Hirko & Sweitzer, 2015; NCAA, 2016c, 2016d; Sperber, 2000; Thelin, 1996) have primarily defined "big-time" programs on the basis revenue production. Division I FBS football and Division I men's basketball have remained on the forefront of revenue generation for most Division I colleges and universities and these two athletic

programs provide the foundation for understanding the role of big-time athletics within the larger context of university relations. Consideration of the structure of institutional affiliations, revenues and expenditures, as well as growing concerns regarding financial and organizational viability illuminate the state of intercollegiate athletics relative to higher education and underscore a “win culture” predicated on competitive advantages for revenue gains.

Division I FBS football programs maintain affiliations among eleven conference designations: Atlantic Coast (ACC), American Athletic (AAC, formerly Big East), Big 12, Big Ten, Conference USA, Mid-American (MAC), Mountain West, Pacific-10 (PAC-10), renamed PAC-12 in 2011, Southeastern (SEC), Sun Belt, and Western Athletic (WAC) (NCAA, 2015b). A small group of additional institutions, The University of Notre Dame, The United States Military Academy, The University of Massachusetts, and Brigham Young University, fall under the designation of FBS independent. These conferences, loosely based on geographic region, serve as the basis for athletic scheduling and heavily influence post-season play opportunities. Researchers (Knight Commission on Intercollegiate Athletics, 2009a, Satterfield, 2015) have further categorized conferences based on prominence within FBS football. Under the Bowl Championship Series (BCS), institutions belonged to either automatic qualifying (AQ), also dubbed the “Power Five,” or to non-automatic (Non-AQ) qualifying conferences. AQ conference (ACC, Big 12, Big Ten, PAC-10, SEC) championship winners earned automatic bids to one of the five BCS sponsored bowls and affiliated programs generally represented the most successful programs in the nation (Knight Commission on Intercollegiate Athletics, 2009a; NCAA, 2015b; Oriard, 2009). Non-AQ conferences (American Athletic, Conference USA, MAC, Mountain West, Sun Belt, and WAC) did

not earn automatic bids to BCS bowls and instead had to meet a series of BCS qualifications to warrant consideration for BCS bowl invitations.

Division I men's basketball programs encompass a larger number of affiliated institutions, as the FBS designation for universities applies only to football programs. Member institutions are sub-divided among 28 conferences, with a small number of institutions classified as Division I independent (NCAA, 2015c). Similar to FBS football, Division I men's basketball conferences fall into a stratified hierarchy, in which the "Power Seven" conferences (ACC, Atlantic 10, Big 12, Big East, Big Ten, Pac-10, SEC) represent institutions with the most prominent basketball programs and historically have received the largest number of bids to the NCAA men's post-season basketball tournament (NCAA, 2015c). As a result of win-based visibility, institutions affiliated with these conferences represent the largest market stakeholders with regard to NCAA and conference payouts, post-season revenues, as well as conference-based television exposure.

Financial Considerations

The financial structure of big-time athletic programs provides a quantified look at the inputs and outputs of one of the most highly visible areas for Division I colleges and universities. With surges in revenues and expenditures over the last decade, big-time athletic programs have increased the financial stakes associated with successful programs and have further reified a culture whereby success directly correlates with earning potential and expenses. As a result, inter and intra-conference competition has reached an all-time high, and has further incentivized competitive advantages in order to sustain and advance athletic programs.

Generated Revenues, the Height of Commercialism, and Stratification

For athletic programs, revenues stem from two primary areas: generated and allocated funds. Researchers (Duderstadt, 2000; Knight Commission on Intercollegiate Athletics, 2009a; NCAA, 2016c, 2016d) have defined generated revenues in relation to intercollegiate athletic programs as funds derived by an athletic program and its associated functions independent from institutionally designated athletic funds. In 2015, alumni contributions (20%), conference distributions (20%) and ticket sales (19%) represented the three largest sources of generated revenue across all FBS big-time athletic programs (NCAA, 2016d). The NCAA (2016d) reported short-term increases in median generated revenues for FBS affiliated institutions in 2015, up 14.5% from 2013 to \$47.9 million. This trend mirrors substantial long-term gains over the last decade, as median generated revenues have increased 109.8% since 2004.

Across all NCAA Division I classifications, football and men's basketball have emerged as the primary revenue sports for athletic departments (Baade & Sundberg, 1996; Duderstadt, 2000; Grimes & Chressanthis, 1994; Hirko & Sweitzer, 2015; Knight Commission on Intercollegiate Athletics, 2009a; 2013; NCAA, 2015b; 2016c; Padilla & Baumer, 1994; Sigelman & Bookheimer, 1983; Thelin, 1996). These trends are most pronounced in the FBS designation, as FCS football programs operate on a smaller financial scale than FBS programs and do not benefit from the revenues associated with prominent post-season playoff and bowl games. While revenue sources at Division I institutions with no football report lower levels of generated revenue and higher institutional subsidies than FBS institutions, men's basketball serves as the highest revenue generating sport across the designation. Furthermore, conferences such as the Big East, which does not sponsor NCAA football programs, maintain

high visibility with regard to competitiveness in NCAA tournament post-season play. In 2015, 56% of Division I FBS football programs and 50% of Division I basketball programs generated revenues in excess of operating expenditures (NCAA, 2016c). In 2015, the NCAA (2016c) reported median net generated revenues for FBS football and men's basketball programs as \$17.46 million and \$2.75 million respectively, figures which have increased roughly 43% for football and 78% for men's basketball since 2004. These net figures illustrate the middle of the road earning potential of big-time athletic programs, but they pale in comparison to the top grossing university athletic programs in the nation. The NCAA (2016c) indicated that the highest gross revenue generating FBS football program earned \$120.7 million in 2015 and the top grossing basketball program yielded \$45.8 million. With total athletic department gross revenue for the highest earning university exceeding \$194.4 million, the funds generated from these sports define big-time athletics and emphasize the financial impact of revenue sports on athletic departments and universities (USA Today, 2017b).

One of the most visible increases in revenues related to big-time athletic programs stems from media coverage of NCAA television contracts and associated conference payments. Following a 1984 antitrust lawsuit against the NCAA, universities gained rights to athletic television coverage, previously monopolized by the NCAA, which ultimately became one of the most crucial revenue sources for athletic programs today (Bass, Schaeperkoetter, & Bunds, 2015; Hirko & Sweitzer, 2015; Noll, 1991). Researchers (Bailey & Littleton, 1991; Knight Commission on Intercollegiate Athletics, 2010; Lumpkin, 2015; Oriard, 2009; Padilla & Baumer, 1994; Thelin, 1996) have underscored the importance of this growing commercialism on intercollegiate athletic finance, as financial stakes associated with post-season play in particular

have contributed substantially to the hyper-competitive nature of college sports. Over the last five years, the NCAA closed on the largest television contracts on record for post-season play in both football and men's basketball. CBS and Turner Broadcasting extended their television and digital media rights to coverage of the annual NCAA basketball tournament and entered into a 14-year, \$11 billion deal with the NCAA, which marked a 41% increase in NCAA revenues from the previous CBS-exclusive contract (NCAA, 2010b; O'Toole, 2010). Similarly, in 2014, the NCAA signed a \$470 million annual contract with ESPN for rights to the newly developed college football playoff games (Smith, 2014). While the NCAA does profit from these media deals, the organization distributes a large majority of revenues to associated conferences with earnings contingent upon conference performance.

Alumni contributions also represent a key source of revenue across all four FBS spending quartiles, and comprise a significant portion of generated revenue for Division I FBS football and Division I men's basketball programs. In 2015, alumni charitable contributions represented the second largest sources of total athletic department revenue for institutions in the top two FBS expense quartiles at 24% and 20% respectively, trailing ticket sales in quartile one (26%) and broadcast rights (21%) in quartile two (NCAA, 2016d). For quartiles three and four, alumni contributions serve as the third largest source of athletic revenue behind a combination of direct institutional support and student fees. These figures represent a strong relationship between athletic programs and alumni, as financial support from this key demographic proves vital to program funding and operation. While research regarding athletic program success and alumni charitable giving remains mixed, NCAA reported Division I data provides support regarding the importance of alumni to big-time intercollegiate athletic programs. Bass et al.

(2015) echoed the importance of alumni contributions, particularly for institutions that operate in the highest tiers of revenue generation. For these institutions, high-profile athletic events and facilities allow university and athletic advancement personnel to offer incentives tied to contributions including seating preferences and access to luxury amenities for games, thus incentivizing donor contributions and allowing programs to sustain relatively high levels of charitable contributions with regard to generated revenue.

As revenues associated with big-time athletic programs have reached an all-time high, stratification between high and low athletic revenue generating institutions has become more pronounced. Dubbed a divide between “haves” and “have-nots,” athletic institutional stratification has become deeper than ever before (Hirko & Sweitzer, 2015; NCAA, 2016c, 2016d). High generating athletic programs further enhance the financial standing of “haves” while “have-nots” struggle to compete due to the lack of comparable opportunities for revenue generation and in turn, lack of funds to maintain competitive spending practices (Callahan, 2004; Duderstadt, 2000; Knight Commission on Intercollegiate Athletics, 2009a, 2010; Litan, Orszag, & Orszag, 2003; Oriard, 2009; Toma, 2010). High-revenue producing athletic programs establish a financial benchmark for program success, in that the funds generated through these athletic departments largely determine operating budgets. Increased athletic generated revenues allow for increased athletic spending, as financial success determines access to additional resources. For example, financial gains from athletic generated revenues affect a university’s ability to attract a high-profile head coach and build and maintain quality facilities, which ultimately elevate a program’s competitive advantage on the field or court. Thus, revenue generation within high-producing programs establishes a standard that other

institutions must match or exceed in order to advance institutional standing with regard to big-time athletics.

Hirko and Sweitzer (2015) argued that revenues for NCAA Division I institutions are largely bound by conference affiliation, as membership determines access to varying revenues for television rights as well as post-season play. With larger athletic generated revenues, the most financially successful athletic programs maintain the ability to invest in the athletic program in order to continue to sustain high levels of revenue attainment. Researchers (Hirko & Sweitzer, 2015; Knight Commission on Intercollegiate Athletics, 2009a; 2013; Oriard, 2009) have indicated that institutions that operate in the top two spending quartiles, particularly in the FBS, generate revenues that far outpace their counterparts due to larger facilities, high-level conference and NCAA payouts associated with competitive conference affiliation, as well as large fan bases typically cultivated via media coverage. For these top-earning programs, larger facilities beget higher ticket sales based on capacity and large fan base, and affiliation with the “Power Five” conferences allows for substantial financial gains with regard to post-season play in revenue sports. Smith (2016) detailed NCAA and conference payouts for the 2015-2016 fiscal year and stated that the “Power Five” conferences shared \$635 million in revenues from FBS bowl games and participation in the NCAA tournament. Each of these conferences also maintains lucrative television deals, which collectively net roughly \$1.1 billion annually (Smith, 2014). For non-elite conference members, revenues generated from post-season play are less lucrative. The SEC and Big Ten conferences topped the rankings for highest revenue conferences in intercollegiate athletics, earning \$515 million and \$431 million respectively during the 2015-2016 fiscal year, whereas Conference USA and the Mid-American conference,

which operate in the bottom two quartiles with regard to spending in the FBS, reported earnings of \$36 million and \$26 million respectively (Smith, 2016). The disparities in earnings, particularly related to NCAA and conference generated payouts, become increasingly clearer when broken down by earnings at the institutional level for each conference. For members of the SEC, the \$515 million in revenue amounted to \$36.8 million distribution per each of the 14 institutions, whereas the twelve members of the Mid-American conferences each received \$2.2 million (Smith, 2016).

Revenue or Subsidy?: Institutional Allocations

Highly visible revenues associated with post-season play, television contracts, and endorsements have contributed to the public perception of athletics as large sources of profit for institutions. However, when contextualized in relation to institutional allocations and athletic program expenditures, a vastly different picture emerges. While athletic generated revenues allow some programs to operate without institutional contributions to athletic budgets, most programs rely on some form of university-funded subsidy. Defined as indirect (e.g. transfers) and direct subsidy (e.g. student fees designated to athletics and state designated funds), institutional allocations comprise varying portions of athletic budgets (Bass et al., 2015; Desrochers, 2013; Knight Commission on Intercollegiate Athletics, 2010; NCAA, 2016c; USA Today, 2017a). As of 2016, thirteen Division I athletic programs operated on funds exclusively generated through athletic programs and reported no institutional subsidy or student athletic fees within athletic department budgets: Texas A&M University, The University of Texas (UT), The Ohio State University, Louisiana State University (LSU), The University of Oklahoma (OU),

The University of Tennessee, Pennsylvania State University, The University of Kentucky, The University of Arkansas, Mississippi State University, The University of Nebraska, The University of South Carolina, and Purdue University (USA Today, 2017b). All other Division I athletic departments reported some form of institutional subsidy, whether through university allocation or student athletic fees. For high-subsidy dependent Division I athletic programs and their respective universities, institutional subsidies account for up to 90% of athletic budgets, as generated revenues only cover an extremely small portion of operating costs (USA Today, 2017b). In 2016, James Madison University (\$38.1 million), The University of Connecticut (\$35.3 million), and The University of Massachusetts (\$34.3 million) received the largest institutional athletic subsidies in the nation. The institutional athletic subsidy at James Madison University accounted for roughly 80% of the total overall athletic budget. Researchers (Bass et al., 2015; Denhart & Vedder, 2010) have argued that while most athletic programs receive subsidies, the total amount of subsidy and percentage of subsidy in relation to total athletic budget has become increasingly stratified, mirroring athletic generated revenue trends. For the “Power Five” conferences, institutional subsidy represents a very small portion of athletic operating costs, and many of these programs operate within the black on an annual basis. These institutions function at a high revenue production level, as their financial stake in television contracts, post-season play, and alumni contributions outpace those of universities in other conferences. As a result, these institutions rely on institutions for little to no subsidy in order to sustain operations. For all other conferences and their affiliated institutions, shares in athletic program payouts for success fall on the lower end of the spectrum, placing these institutions in a situation where additional funds become necessary in order to avoid athletic budget deficits.

Thus, a wide spectrum of intercollegiate athletic finance emerges, whereby top producing institutions sustain athletic programs through athletic production alone and less financially lucrative athletic departments struggle to manage program costs through revenue generation, instead relying more heavily on institutional allocations to fund operations.

Expenditures and the Growing "Arms Race"

The notion of the "cost disease" suggests that costs in higher education rise due to societal and economic pressures that prompt demands for increased resource production, specialized workers, and growth in institutional services. Researchers (Archibald & Feldman, 2008; Leslie & Rhoades, 1995) have indicated that as a field, higher education functions as a low-productivity industry, in that institutions must manage rapid increases in expenditures without proportional increases in growth necessary to offset or aid in managing rising costs. The result is a struggle to maintain financial viability relative to necessary costs associated with expansion. Two primary sources of expenditures contribute to the cost disease within higher education: capital skill complementarity (Archibald & Feldman, 2008; 2011) and the administrative lattice (Archibald & Feldman, 2008; Leslie & Rhoades, 1995). Under the premise of capital skill complementarity, colleges and universities require a specialized workforce capable of assuming specific roles and functions similar to other professional industries (medicine, law, dentistry, etc.) (Archibald & Feldman, 2008; 2011). In order to hire and retain highly trained workers capable of implementing and sustaining field-based advances, institutions must invest in salaries and the appropriate technologies to remain at the forefront of field-based demands. This necessity results in higher costs for institutions with an extremely

low return on initial investment. Researchers (Archibald & Feldman, 2008; Leslie & Rhoades, 1995) have also emphasized the role of the administrative lattice in driving cost disease within higher education. The administrative lattice refers to the expansion of the number of services and functions that institutions offer in order to provide an increasing number of services for institutional stakeholders. Increased services often prompt the creation of new departments and offices designated to house said institutional functions and colleges and universities must also hire additional staff as service providers (Leslie & Rhoades, 1995). Similar to capital skill complementarity, these changes in organizational structure in order to provide administrative support result in new or increased costs for an institution in the form of personnel, physical space, and functional resources. For example, following the creation and enactment of Title IX in 1972, institutions expanded campus services in order to house newly mandated compliance offices and hired staff to oversee federal regulations regarding gender equity on campuses (Lough, 2015; Osborne, 2015). Services offered further increased in 1979 as the Office of Civil Rights extended Title IX provisions to encompass intercollegiate athletics (Osborne, 2015). In addition to the creation of physical offices on campus for general Title IX equity services, colleges and universities also expanded resources for parity in athletic programs through the creation and/or modification of facilities to ensure equal access. Furthermore, new guidelines for university sponsored athletic programs necessitated hiring additional staff as coaches, equipment managers, and trainers (Lough, 2015). As a result, colleges and universities saw large increases in costs associated with a greater number of athletic programs in order to maintain compliance with federal mandates for equality. These additional costs did not yield

increases in productivity associated with newly created women's sports to offset the financial expenditures.

These larger aspects of the cost disease also apply to the current financial landscape of intercollegiate athletics. Researchers (Frank, 2004; Hesel & Perko, 2010; Hirko & Sweitzer, 2015; Knight Commission on Intercollegiate Athletics, 2009a; 2009b; Oriard, 2009; Sparvero & Warner, 2013; Sperber & Minjares, 2015; Tsitsos & Nixon, 2012) have outlined the growing costs associated with big-time athletic programs. While direct financial benefits, particularly television contracts, ticket sales, and alumni support create opportunities for substantial revenue generation for athletic departments and respective universities, the staggering costs related to program sustainment emphasize the need for continued large-scale financial gains in order to maintain competitiveness. The Knight Commission on Intercollegiate Athletics (2019) noted that between 2010 and 2015, Division I athletic spending outpaced academic spending, with the largest gaps most evident at FBS institutions. From an athletic budget perspective, Division I FBS institution expenses related to athletic programs substantially outpaced revenues, as median expenses grew 22.6% from 2011 to 2013, with median total expenditures increasing by more than 114.6% since 2004 (NCAA, 2016c). While the highest-grossing athletic programs yield modest profits, mid-major and less financially lucrative athletic programs struggle to balance competitive positioning with regarding to athletic budget bottom lines.

Fort (2010) indicated that the median Division I athletic department operates via a financial model whereby revenues equal expenditures. For these institutions, all revenues earned by athletic departments are spent as funds to sustain basic operations. Higher grossing athletic programs, which include Texas A&M University, The University of Texas, and The

University of Alabama, net revenues that allow small surpluses as expenditure figures remain close to or less than revenue generated (USA Today, 2017b). Successful athletic departments typically utilize profits as funds for athletic construction via endowments (Fort, 2010; Orszag & Israel, 2009). These larger, profitable big-time athletic programs create a normative standard for intercollegiate athletic spending, whereby institutions face pressures to spend at rates that maintain a level of competitiveness with regard to facilities, coaching staff, and program resources including recruitment. While top grossing big-time athletic programs net profits to fund these expenses, many mid-major and less financially profitable athletic programs incur substantial debt as a result of pressures to invest in athletics in a manner that maintains program relevance and competitive edge in relation to peer institutions. The NCAA (2016d) reported net generated revenue for Division I FBS schools as ranging from a profit of up to \$83.3 million to losses of up to \$44.6 million, with median net generated revenue totaling - \$12.87 million. For FCS and Division I no football institutions, net generated revenues ranged from -\$2.3 million to -\$35.8 million and -\$1.6 million to -\$39.2 million respectively.

Researchers (Duderstadt, 2000; Hirko & Sweitzer, 2015; Orszag & Israel, 2009) have noted that the increased revenues and subsequent spending have contributed to an “arms race” in athletics, in that institutional athletic expenditures are driven by market pressures to maintain competitiveness amongst peer institutions. Orszag and Israel (2009) found a statistically significant relationship between peer institution spending within a conference and increases in an individual institution’s athletic operating expenditures. For universities within a given conference, a \$1 increase in peer institutions’ athletic expenditures resulted in a \$0.60 increase in the university’s athletic operating expenditures. Across all Division I designations,

athletic program expenditures include salaries and benefits, which during the 2014-2015 fiscal year accounted for roughly a third of FBS athletic budgets, grants-in-aid, facilities, travel and equipment costs, as well as other miscellaneous expenses related to program management and athletic department operations (NCAA, 2016d). Researchers (Knight Commission on Intercollegiate Athletics, 2009b; 2010; Hirko & Sweitzer, 2015) have argued that while many costs within athletic departments remain relatively fixed, including number of grants-in-aid awarded and deferred maintenance, two primary areas continue to drive the arms race in intercollegiate athletic spending: coaching personnel salaries and facility construction and maintenance. Given the financial gains associated with successful revenue sports programs, institutions and athletic departments seek to spend money in order to better position themselves for revenue maximization. For big-time athletic programs, top facilities and coaching staff allow for better recruitment possibilities, increased capacity for ticket sales, and in turn, more competitive standing with regard to resource attainment for revenue production.

The rise of “star” athletic coaches, particularly in Division I FBS football and Division I men’s basketball, has placed more pressure on institutions to increase expenditures on salaries and benefits for athletic personnel (Desrochers, 2013; Sperber & Minjares, 2015; Tsitos & Nixon, 2012; Yost, 2010). When The University of Alabama extended Nick Saban’s contract as the head football coach to include an annual salary of \$6.9 million, he became the highest paid college football coach in the nation (Berkowitz, 2014). Saban, in addition to his base salary and a tax-free, mortgage free home subsidized by The Crimson Tide Foundation, also benefitted from performance-based incentives tied to post-season play. The athletic department pays for bonuses up to \$750,000 contingent on team participation in bowl games, national

championship status, as well as conference and division-based coaching awards. This \$55.2 million contract set a precedent for athletic spending and redefined the high-cost environment in which intercollegiate athletics functions. In 2017, Saban signed an eight-year contract extension that increased his salary to \$65 million (\$11.125 million annually), which re-established his position as the highest paid coach in college football and furthered the ever-growing arms race (Berkowitz, 2017).

For other institutions, The University of Alabama created a new standard for coaching talent and compensation as historically, athletic programs have reevaluated athletic compensation packages following market shifts dictated by peer institutions (Oriard, 2009). In 2015, salaries and benefits topped athletic department expenditures for all Division I FBS, FCS, and Division I no football programs nationwide, ranging from 32% to 38% of total expenses (NCAA, 2016d). Growing costs associated with head coach salaries, however, are not exclusive to FBS football, as Division I men's basketball programs face similar pressures to maintain salaries competitive with increases driven by peer institutions. In 2017, John Calipari earned \$7.4 million for his position as head coach of men's basketball at the University of Kentucky, a raise of \$560,000 from the previous year and more than doubling his salary from 2011 (USA Today, 2017c). While coaches within more prominent conferences earn larger salaries, Division I no football schools, which tend to have smaller athletic budgets due to the lack of dual big-time revenue sports in football and men's basketball, remain competitive in compensation for men's basketball coaches. In 2016, Jay Wright, the head men's basketball coach at Villanova University and Ed Cooley, the head men's basketball coach at Providence College, both within the Division I no football Big East conference, collected salaries of roughly \$2.54 million and \$2

million respectively (USA Today, 2017c). These compensation packages exceeded the median salaries reported by the NCAA (2016c) at Division I FBS (\$1.38 million) and Division I no football (\$379,000) institutions, further illustrating the pressures to attract and retain coaching staff. The Knight Commission on Intercollegiate Athletics (2009b; 2010) noted that anti-trust laws prohibiting salary caps have forced athletic departments to spend at rates higher than ever before, and without reform to control spending in this area, salaries and benefits will continue to exacerbate spending trends.

Researchers (Orszag & Orszag, 2005; Yost, 2010; Zimbalist, 1999) have also identified facilities as a key area of athletic spending that further perpetuate market competition between peer institutions. Orszag and Orszag (2005) noted that annual athletic capital costs comprise a significant share of total athletic expenditures, particularly for Division I institutions. Defined as funds utilized toward athletic facilities for maintenance, construction, or expansion, this physical capital stock for institutions represents an area subject to continuous increases in expenditures, as needs for ticketholder capacity, practice facilities, athletic training areas, and associated maintenance continue to grow. While institutions tend to invest more heavily in facilities for revenue sports, non-revenue generating sports facilities also receive upgrades in order to create a competitive edge in recruiting and fundraising. Researchers (Yost, 2010; Zimbalist, 1999) have underscored the importance of potential revenue generation as a primary motivator with regard to athletic capital expenditures, as colleges and universities view increased stadium or facility capacity as a means to heighten ticket sales and the inclusion of luxury amenities as a benefit conducive to bolstering fundraising efforts.

This trend is most pronounced when considering Division I football stadium capacity

(Orszag & Orszag, 2005). While little research exists specifically comparing institution to peer institution spending related to athletic capital costs, Orszag and Orszag (2005) posited that Division I-A institutions (now Division I FBS) face pressures to increase spending related to facilities contingent upon spending patterns by in-conference peers. Olson (2014) illustrated this trend via stadium renovations and construction in the Big 12. In 2012, following a rise in the performance of the football team, Texas Christian University (TCU) invested \$164 million in stadium reconstruction, bringing seating capacity at the Amon G. Carter stadium to 45,000. In 2014, Baylor University opened McLane Stadium, a \$250 million new construction, with a capacity of 45,000. The same year, The University of Oklahoma announced plans to for a \$370 million football stadium renovation in order to expand capacity and amenities (The University of Oklahoma, 2014). Yost (2010) noted similar trends in the Big Ten conference. Between 2001 and 2010, Pennsylvania State University, The University of Wisconsin, The University of Michigan, Michigan State University, and The Ohio State University all undertook renovation and construction projects to increase the capacity and quality of football and basketball facilities. Duderstadt (2000) asserted that football stadium at The University of Michigan serves as a marker of prestige for the institution. With a seating capacity of 107,601 “The Big House” is the largest stadium in the United States, surpassing professional sports facilities across the nation, and garners public attention based on size alone (The University of Michigan, 2017). For the university, the recognition associated with the stadium has helped define the athletic program at The University of Michigan, and Duderstadt (2000) stated that as other universities began expanding facility capacity during his tenure, the athletic directors at The University of Michigan ensured the athletic program’s hold over the title of largest stadium on record by

strategically expanding seating sections. While no empirical research exists to directly link the capital spending increases to the behaviors of other institutions, the expansion and clustered construction projects may suggest intra-conference pressures to invest and revamp facilities.

Concerns Over Sustainability

Ultimately, big-time athletic programs function within a high financial-stakes environment, in which opportunities are contingent upon high levels of spending. From facilities and recruitment to coaching staff, colleges and universities continue to spend more money than ever in an attempt to build successful, nationally recognized athletic programs and build institutional stature (Oriard, 2009; Sperber, 1990; 2000; Thelin, 1996). For successful teams in major conferences, short-term sustainability of a high-revenue/high-expenditure model appears feasible given the steady increases in major revenue sources over the last ten years. However, for less financially viable programs, questions have emerged over short and long-term ability to compete in an arena in which costs of success are driven by institutions with athletic programs that operate at unattainable levels for lower and mid-major programs (Clotfelter, 2011; Duderstadt, 2000; Knight Commission on Intercollegiate Athletics, 2009b; 2010).

This widening gulf between “haves” and “have-nots,” driven by increased commercialism and the arms race fueled by rampant spending trends, has created a market whereby institutions affiliated with non-elite conferences may become priced out with regard to Division I competition. Unlike many of the institutions affiliated with power conferences, large portions of athletic budgets at institutions with mid-major and lower-tier athletic

programs stem from institutional allocation or subsidies (Denhart & Vedder, 2010; NCAA, 2016c; USA Today, 2017b). The Knight Commission on Intercollegiate Athletics (2009b) indicated that 75% of institutional presidents in the FBS expressed concern regarding costs associated with big-time athletics and the spending levels necessary to achieve/sustain successful programs. These sentiments appeared magnified for presidents within non-elite conferences, as roughly two-thirds stated that rising institutional subsidies for athletics constituted negative return on investment from a financial perspective. Furthermore, more than half of presidents at non-AQ universities indicated concerns regarding their institutions' abilities to maintain affiliation with the FBS.

Big-time athletic programs are a losing proposition for most institutions. However, the magnitude of financial losses appears most prominent for institutions affiliated with non-equity conferences. For these institutions, reliance on higher proportions of subsidy to athletic generated revenue necessitate growing institutional financial investment in athletic programs in order to keep pace with division spending trends. Without conference advancement or the access to platforms whereby revenue generation appears comparable to financially profitable major athletic programs, these institutions will continually fall behind with regard to program operations (Hirko & Sweitzer, 2015). This effectively limits facility construction or renovation, financial capacity to attract more prominent coaching staff, and, indirectly, athlete recruitment programs. If athletic spending continues to mirror the growth over the last decade, mid-major and lower-tier big-time athletic programs may reach financial stagnation, in that university investment in athletic programs that yield negative financial benefits may reach a point where

competition within Division I FBS or Division I classifications can no longer be sustained (Hirko & Sweitzer, 2015; Knight Commission on Intercollegiate Athletics, 2009b).

Indirect Benefits

Big-time athletic programs, in addition to potential for financial gains, create a number of indirect benefits for Division I colleges and universities. Researchers (Goff, 2000; Knight Commission on Intercollegiate Athletics, 2009a) have defined indirect benefits of intercollegiate athletic programs as tangential institutional outcomes related to athletic programs including: institutional visibility, external relations management, institutional positioning, and alumni charitable giving. Although not as easily quantified as the direct financial outcomes, such as media contracts and ticket sales, indirect benefits prove equally, if not more, valuable to colleges and universities in maintaining specific resources and establishing a university's image and legitimacy.

Enhanced Institutional Visibility

Colleges and universities, through their conference affiliations and post-season eligibility, receive revenues from negotiated television contracts, as well as bowl and tournament appearances. These direct financial benefits to a university represent the tangible effects of big-time athletics. However, researchers (Frank, 2004; Knight Commission on Intercollegiate Athletics, 2009a; Roy et al., 2004; Toma, 1998; 1999; Weisbroad et al., 2008) have also underscored the indirect, non-financial benefits of media coverage in the form of enhanced visibility and institutional publicity. In 2014 and early 2015, big-time college athletics

reached new levels of exposure via post-season play media coverage. The 2015 college football championship game aired on ESPN became the most viewed program in cable television history, reaching a national audience of 33.4 million across 22 geographic markets (Adgate, 2015; Volner, 2015). While the college football championship game represents the largest event in post-season play, regular-season games also receive substantial television coverage. Viewership fluctuates in relation to athletic performance, size of institution, and reputation of athletic programs, but the relatively high levels of visibility that institutions attain via big-time football media coverage substantially enhances the publicity of a university by name recognition alone. Post-season Division I men's basketball media exposure offers institutions additional opportunity to broaden university visibility. During the 2017 NCAA Division I men's basketball tournament, television broadcasts of all 16 tournament rounds averaged 10.8 million viewers per game with an additional 98 million live streams of games via March Madness websites and social media platforms (Turner, 2017). For winning teams, media exposure increases with advancement to subsequent rounds in the tournament. The NCAA (2017c; 2017d) reported that 22.9 million viewers tuned in to the tournament championship game on television and an additional 9.6 million individuals across 176 countries utilized web-based platforms to stream the game. These numbers indicate the scope of the event and illustrate the level of visibility gained by participating institutions. While post-season play represents the height of big-time athletic competition and, in turn, garners the largest amount of publicity, universities also benefit from weekly team coverage of regular season games. Furthermore, additional sources of visibility including media-sponsored pre and post-game shows, social media linked to college football/men's basketball reporting, as well as online and print media

related to athletic team performance advance a university's presence and visibility on local, regional, and national levels.

Weisbrod et al. (2008) indicated that roughly half of a university's media coverage stems from athletic performances. Exposure via televised games and continuous sports coverage online and in print increases visibility for both athletic programs as well as institutions and serves as an unintentional form of institutional advertising, which researchers (Frank, 2004; Knight Commission on Intercollegiate Athletics, 2009a; Roy et al., 2004; Weisbrod et al., 2008) have described as equally or more effective than deliberate advertising efforts. This estimation highlights the impact of big-time athletic programs with regard to building institutional image and bolstering publicity. Roy, Graeff, and Harmon (2008) underscored the importance of big-time athletic programs in establishing an institution's visibility via media presence. While successful teams develop local, regional, and national reputations based on their televised play, thus promoting institutional visibility and brand awareness, researchers (Beyer & Hannah, 2000; Goff, 2000; Roy et al., 2008) have also linked teams with unsuccessful records to positive institutional brand recognition, as sheer media presence increased university media coverage. Print, radio, television, and social media exposure create a conditioning effect, whereby increased institutional visibility equates to broadened institutional reach and greater overall brand recognition (Anctil, 2009). Utilizing this, universities, successful or not in athletic competitions, often parlay visibility and publicity gained via athletic exposure into advancement of institutional image, mission, and brand (Anctil, 2009; Toma, 1998; 1999; 2010). Given the large-scale public attention associated with Division I spectator sports, colleges and universities ultimately gain an indirect vehicle to extend the reach of university visibility. Coverage of

athletic programs, particularly those with successful records, has the ability to further cement the prestige associated with prominent universities and generate institutional visibility and legitimacy for lesser-known schools (Anctil, 2009; Frank, 2004; Goff, 2000; Mitten, Musselman, & Burton, 2009; Roy et al., 2008; Toma, 1998).

Thelin (1996) also documented trends and subsequent effects of enhanced institutional visibility following in-game instances of big-time athletic successes. In 1984, the Boston College football team competed against the nationally ranked University of Miami Hurricanes in what became one of the most widely remembered games in college football history. Down by four points in the last six seconds of the game, the then Boston College quarterback, Doug Flutie, executed a successful Hail Mary play to win the game. The game cemented Boston College's top five ranking in the final Associated Press poll and resulted in a bid to the Cotton Bowl, televised on New Year's Day (Chung, 2013; Johnson, 2006). In addition to the team accolades, Flutie won the Heisman award for his athletic successes throughout the season, thus heightening the already increased excitement surrounding the 1984 football season. In the two years following the win, student applications to Boston College increased by 25-30%, thus suggesting a surge in institutional popularity in relation to the publicity surrounding the football program (Chung, 2013). Researchers have coined this increased institutional visibility in the wake of athletic program successes as the "Flutie effect," and have highlighted other prominent examples of the relationship between enhanced institutional visibility and successful seasons in football or men's basketball at Northwestern University (Goff, 2000; Toma, 2003; Weisbrod et al., 2008), Texas Christian University (Chung, 2013), Western Kentucky University (Goff, 2000), Boise State University (Chung, 2013), and The University of Massachusetts (Zimbalist, 1999). While the

specific benefits of institutional visibility remain contested and appear to vary by university specifically with regard to application increases, academics, and direct financial gain, researchers (Chung, 2013; Knight Commission on Intercollegiate Athletics, 2009a; Tucker, 2004; Weisbrod et al., 2008) have highlighted the benefit of heightened university publicity related to certain conditions surrounding success in big-time intercollegiate athletics.

Relationship Building

For colleges and universities, relationship building between the institution and external constituencies represents a vital component to resource development and sustainment. Toma (1999) noted that universities often face difficulties relaying evolving missions, goals, and academic merits of the institution to external constituencies. Given the specialized nature of higher education relative to other fields, these concepts may be perceived by alumni, community members, and other supporters as abstract or irrelevant in defining their connection with the university. For these reasons, external constituencies and stakeholders oftentimes only maintain casual, indirect relationships with their respective universities. The visibility of big-time athletic programs assists in bridging the gap between the public and the college and (re)creating an institutional connection (Fisher, 2009; Roy et al., 2004, 2008; Toma, 1998, 2010).

Research regarding indirect benefits of big-time athletic programs overwhelmingly supports the notion of football and men's basketball programs as substantial factors in growing, enhancing, and sustaining institutional image and relationships with local and national communities of supporters (Anctil, 2009; Beyer & Hannah, 2000; Daughtrey & Stotlar, 2000;

Duderstadt; 2000; Fisher, 2009; Goff, 2000; Stinson & Howard, 2010; Toma, 1998; 1999; 2010).

As the “face” or “front porch” of institutions, big-time athletic programs represent the most widely publicized facets of institutions, and in turn, become the first point of reference with regard to external constituencies’ perceptions of a university (Bass et al., 2015; Duderstadt, 2000; Schulman & Bowen, 2001; Stinson & Howard, 2010; Toma, 1998; 1999). Unlike other functional areas of a college or university, athletic programs appear accessible to the general public and alumni in that these groups can directly engage with athletic programs on a year-round basis by attending promotional events (tailgating, fan days, signings, banquets) and games (Stinson & Howard, 2010; Toma, 2010). In 2016, 38 million people attended home football games across 128 FBS institutions, an increase of roughly 6 million since 2004, with an average game of 43,070 (NCAA, 2016a). Total attendance at FBS home football games far outpaced that of lower-competitive tiers including FCS (5.4 million), Division II (3.2 million), and Division III (2.4 million), thus reinforcing the broad reach of big-time athletic programs. Similar trends emerge for Division I men’s basketball. In 2016, total attendance at Division I men’s basketball home games across 354 institutions was 24.4 million, which exceeded the 2.6 million in attendance across 305 Division II men’s basketball programs and the 1.87 million across 418 Division III men’s basketball programs (NCAA, 2016b).

For institutions, athletic event attendance represents an opportunity for potential relationship cultivation and sustainment. Toma (1998, 2010) noted that these interactions between stakeholders and a university provide the groundwork for institutional brand loyalty and create an area of interest for pockets within the population otherwise detached from university life. Through the creation of tangible avenues for involvement with an institution,

colleges build and sustain relationships via the most visible extension of the university and create an initial touch point through which external supporters develop a vested interest in athletic teams and, by proxy, the institution (Goff, 2000; Toma, 1998, 2003, 2010). Researchers (Roy et al., 2008; Toma, 1998, 2010) have argued that this interaction cultivates positive stakeholder perceptions of an institution and generates goodwill, thereby establishing a basis for positive future interactions, and potential donations, beyond athletic programs.

Institutions, however, must carefully manage these interactions and perceptions associated with athletic programs, as big-time sports, due to the intrinsic ties to institutional visibility and external relations, serve as surrogate indicators for universities. Researchers (Roy et al., 2004) noted that in instances where individuals lack detailed knowledge of an organization, initial touch points cultivated through the most visible outlets form the basis for judgments regarding institutions as a whole. These surrogate indicators assist in impression formation for individuals or constituencies with weak ties to an organization from a relational standpoint. In the case of colleges and universities, big-time athletic programs represent an accessible, highly visible area of an institution whereby community members establish initial connections with the university, and individuals may utilize athletic program characteristics, successes, or failures as markers of overall organizational quality (Toma, 1999). Roy et al. (2004) found that institutional alumni perceived university realignment with more successful athletic conferences or reclassification into a more competitive NCAA tier of play as indicative of increased institutional prestige or success at the organizational level. These athletic changes, thus, functioned as surrogate indicators in that alumni, lacking direct connections to their respective institutions post-graduation, utilized the upward mobility with regard to conference

or division affiliation as the basis for determining the state of their universities. For alumni, connections with academic departments may fade over time. However, athletic programs, particularly football and men's basketball, remain a constant facet of university life easily tracked via media coverage and attendance at athletic sponsored events (Toma, 1999). As such, the health of an athletic program may become reflective of perception development regarding the university as a whole.

Institutional Positioning

Researchers (Goff, 2000; Lifschitz, Sauder, & Stevens, 2014; Sweitzer, 2009; Toma, 1998; 2003; 2010) have indicated the importance of intercollegiate athletic programs with regard to institutional differentiation and positioning. Toma, Dubrow, and Hartley (2005) argued that organizational brand identity functions as the single most important method of university marketing from recruitment and fundraising perspectives. Through the development and projection of a clear, easily identifiable brand, institutions differentiate themselves from competitors and create an image with which stakeholders and the general public may identify. Big-time athletic programs aid in brand cultivation for colleges and universities in that athletic symbols become synonymous with an institution and stakeholders utilize these markers in identifying colleges and universities. Bass et al. (2015) argued that these symbols are paramount in creating brand identity, as athletic phrases and slogans, facility characteristics, and star coaches all define big-time athletic programs, and by association, colleges and universities. The University of Michigan and Boise State University became easily identifiable during national broadcasts because of their football stadiums, as the "Big House" at the

University of Michigan as well as the blue turf at Boise State University have become staples in defining the institutions relative to other universities and athletic programs (Bass et al., 2015). Similarly, The University of Oklahoma and The University of Alabama have utilized the phrases “Boomer Sooner” and “Roll Tide,” respectively, as battle cries during athletic events and have effectively parlayed said phrases as extensions of the institutions’ brands.

Toma (1998) argued that the cultivation of institutional identity and the development of prestige occur in relation to peer institutions and intercollegiate athletics provide both a literal and figurative competitive arena for university advancement and differentiation. Researchers (Toma et al., 2005) noted that competition plays a crucial role in fostering institutional identification, as the presence of competitors furthers individuals’ connection with their respective organization(s). Thus, by building successful big-time programs on and off the court/field, universities not only boost their athletic profiles, but also heighten institutional profile. Through win/loss records as well as associated resource development to bolster facilities, institutions differentiate themselves from peer institutions within their respective conferences (Toma, 2010). Competition within a conference or a division typically occurs between institutions with similar characteristics or profiles, and big-time athletic programs, particularly football and men’s basketball, contribute to reputation building and differentiation within a relatively homogenous field. Toma (2010) indicated that large state universities bear qualities that render them relatively indistinguishable from one another to the general public, potential students, and potential stakeholders. Furthermore, many of these institutions lack the well-established academic pedigree that aids in differentiating Ivy League universities from other colleges and universities, thus furthering the relative homogeneity within geographic

pockets across the nation. For state institutions in particular, the cultivation of big-time athletic programs aids in distinguishing institutions within a geographic area and exposure associated with affiliation within a particular conference or a high-level of competitive play creates a level of distinction from peers and may garner institution attention difficult to attain based on academic merit alone.

Institutional classification by NCAA Division I designation and athletic conference also contributes to university positioning relative to peer institutions and signals a level of athletic quality beneficial in differentiating institutions (Roy et al., 2004; Sweitzer, 2009). While the general public form opinions on institutions partially derived from national ranking systems and Carnegie classifications, athletic program conference affiliation may also play a role in building perceptions of institutions, particularly in the absence of academic pedigree (Sweitzer, 2009; Toma, 2010). Researchers (Roy et al., 2004; 2008) have indicated that both the general public and university alumni perceived institutions at the highest level of competitive play within the NCAA as more prestigious than those in lower classifications (Division II and Division III).

Conference affiliation further differentiates institutions and Sweitzer (2009) argued that membership serves as an inherent ranking system for colleges and universities. For FBS football programs, the “Power Five” conferences represent the highest revenue generating conferences and house some of the most successful football programs in the country. Membership within one of these conferences typically signifies a level of competitive play, resource attainment, and prestige that differentiates an institution from those affiliated with other conferences. In Division I men’s basketball, the “Power Seven” conferences represent the most prestigious classifications and member institutions boast some of the most competitive athletic programs

in the nation. Sweitzer (2009) noted that institutions utilize conference affiliations in a strategic manner in order to position themselves for greater athletic generated revenue and increased media exposure. In turn, these institutions further differentiate themselves from geographic peers. One of the most recent examples of this benefit of intercollegiate athletic conference affiliation is Texas A&M University's shift from the Big 12 conference to the SEC in 2011. In realigning with the SEC, Texas A&M University created opportunities for greater conference distributions from the NCAA. While the Big 12 boasts competitive football play, the transition to the SEC signified Texas A&M University's membership within the most prominent conference in Division I football and the institution attained a new level of prestige associated with affiliation (ESPN, 2011). In addition, the shift in Texas A&M University's conference status further differentiated the institution from other prominent Texas universities with regard to intercollegiate athletics. Texas Christian University (TCU), Texas Tech University, The University of Texas (UT), and Texas A&M University all garner national attention for successful football programs. However, all but Texas A&M University compete within the Big 12. Texas A&M University's status as an SEC school therefore indicates their potential for competitive advantage and increased athletic program profitability relative to geographically similar institutions due to membership in the highest grossing conference in Division I athletics.

Alumni Charitable Contributions

Over the last thirty years, colleges and universities have been forced to cope with the decreases in overall state subsidies through reliance on increasingly diverse revenue streams (Weisbrod et al., 2008). Charitable contributions from external constituencies represent a vital

source of alternative funding within higher education. In 2016, colleges and universities participating in the VSE survey collectively reported \$41 billion in contributions, the highest figure on record in survey history (CAE, 2017a). For many higher education institutions, alumni represent a large revenue stream within the charitable giving classification. In 2016, alumni gifts to colleges and universities totaled \$9.93 billion, roughly 24% of total charitable giving (CAE, 2017a). Alumni contributions represented the second largest source of donation revenue behind foundations, whose total contributions comprised 30.4% of total charitable giving at \$12.45 billion. Private institutions, which rely more heavily on charitable contributions in combination with tuition discounts in the absence of state subsidies, may experience higher total contributions with regard to alumni giving in a more pronounced manner than public institutions (Desrochers & Hurlburt, 2016). However, the rising emphasis on advancement and charitable giving at public institutions suggests that alumni charitable giving remains a viable resource for all higher education institutions seeking to maintain diverse streams of revenue. While researchers (Roy et al., 2004; Stinson & Howard, 2007) have emphasized the importance of institutional alumni with regard to giving relative to other donor populations, findings regarding the relationship between athletic program successes and alumni charitable giving remain inconclusive.

Researchers (Ahern & Joyaux, 2007; Sargeant & Woodliffe, 2007; Stinson & Howard, 2010) have stressed the importance of individualized connections with potential donors and the role of long-term relationship building with regard to charitable contributions. Through various athletic program events, fundraisers and universities create accessible, consistent engagement opportunities with alumni not predicated on financial return with each interaction.

Thus, these programs create opportunities for visitors, supporters, and community members to visit an institution's campus and create or extend relationships with the university, which may enhance the prospect for future financial returns as the relationship evolves (Duderstadt, 2000; Toma, 2010). Although universities leverage athletics as a method to build alumni connections to institutions, empirical data regarding the impact and extent of athletic influence on alumni charitable contributions fails to definitively characterize giving patterns. Researchers (Baade & Sundberg, 1996; Frank, 2004; Litan, Orszag, & Orszag, 2005; Schulman & Bowen, 2001; Sigelman & Carter, 1979; Turner, Meserve, & Bowen, 2001) have demonstrated no significant link between win/loss records and alumni propensity to donate to an institution. While acknowledging the relevance of athletics to alumni populations, these authors indicated that regular in-season play did not represent a major factor prompting surges in alumni giving. Other researchers (Brooker & Klastorin, 1981; Coughlin & Erikson, 1984; Grimes & Chressanthis, 1994; Rhoads & Gerking, 2000; Sigelman & Bookheimer, 1983; Stinson & Howard, 2007, 2008; Tucker, 2004), however, have reported a correlation between big-time revenue sports programs' win/loss records and total alumni giving to their respective undergraduate institutions. Tucker (2004) explained that the publicity surrounding a winning football team increases an institution's profile, thereby increasing the likelihood of alumni contributions. This idea lends support for Brooker and Klastorin's (1981) finding indicating a positive relationship between the number of alumni donors and football win records within major athletic conferences. There is also a demonstrated link between NCAA BCS bowl appearances and increased alumni giving (Baade & Sandberg, 1996; Brooker & Klastorin, 1981; Rhoads & Gerking, 2000). Baade and Sundberg (1996) noted that while football win records did not affect

alumni giving, bowl appearances resulted in increases in total alumni institutional giving at both private and public institutions. Rhoads and Gerking (2000) supported the concept of increased alumni total institutional giving related to NCAA BCS bowl games, and stated that alumni contributions increased an additional 7.3% with a bowl game win.

While empirical support for a direct causal relationship between successful athletic programs and alumni giving trends remains unclear, researchers (Grimes & Chressanthos, 1994; McCormick & Tinsley, 1987; Rhoads & Gerking, 2000; Sigelman & Bookheimer, 1983; Turner et al., 2001) have argued that athletic programs bolster institutional image and prestige, which indirectly affect alumni populations, despite the mixed research regarding NCAA Division I football and men's basketball and total alumni charitable contributions. Gaski and Etzel (1984) found no direct, immediate relationship between in-game performance during regular season play and alumni giving. While the authors underscored the lack of direct connection between big-time athletic program performance and alumni giving, they explained that successful seasons contribute, over time, to increases in institutional prestige, visibility and profile, all of which increase propensity for alumni giving to a college or university. Thus, the establishment of patterns of success, particularly in revenue sports, may indirectly enhance trends in giving over a long-term period.

Scandal, Sanctions, and Institutional Response

The financial landscape of big-time athletics is precarious in that institutions must work to carefully sustain revenues to aid in offsetting rising costs. With only half of Division I football and men's basketball programs reporting revenues exceeding expenditures, the remaining half

struggle to find balance between the benefits of high-level competition and the growing expenditures associated with big-time athletics. From a broader perspective, this financial strain is amplified, as only 24 of 128 FBS athletic departments reported positive net generated revenues, with the remaining athletic departments operating in a deficit ranging from -\$188,000 to -\$44.6 million (NCAA, 2016c). For programs operating in the black, football and men's basketball drive a majority of earned revenue and these programs sustain the financial health of the athletic department. For financially struggling athletic departments, respective institutions must continue to increase university athletic subsidies and expand other resource streams in order to compensate for lack of generated revenues. This creates a delicate balance for institutions on both sides of the ledger in that high grossing athletic departments rely on the successes of prominent big-time football and men's basketball teams to sustain revenue streams and struggling athletic departments attempt to enhance revenue-generating teams to avoid further institutional strain via subsidy.

Threats to athletic resources present a serious concern for institutions, as the financial ramifications of decreased generated revenues increases university athletic costs in a field already driven by ever-growing expenditures. NCAA scandals represent perhaps of the most damaging threats to big-time athletic programs. Programs, facing pressures to win, heightened commercialization, and competition for resources may capitalize on rule violations in order to create, enhance, or sustain financial opportunities (Lumpkin, 2015; Sperber, 1990; 2000; Zimbalist, 1999). However, if apprehended and investigated, the negative financial penalties incurred via NCAA sanctioning and associated stakeholder fallout may create short and long-term repercussions (Hughes & Shank, 2005; 2008; Winfree & McCluskey, 2008).

History of Scandal and Attempted Reform

By the early 1900s, intercollegiate athletics had evolved from intermural sports and club organizations into a structured, formal subunit within higher education. Through this legitimization of sport as a function to advance higher education, paid coaching staff, student-athlete subsidies, competitive schedules, and external regulations emerged (Bok, 2012; Chu, 1982). Duderstadt (2000) noted that the popularity of intercollegiate athletics soared in the early 1900s, despite the misgivings of university administration, and football in particular emerged as the most visible aspect of many institutions. During this time, the dichotomous nature of intercollegiate athletics began to take shape. Athletic programs provided benefits for institutions in the form of building relationships with communities and enhancing institutional visibility, but also brought forth ethical issues, as the early roots of commercialism and competition had altered institutional purposes for athletic program growth and sustainment (Bass et al., 2015; Thelin, 1996). Reports of rampant injuries and questionable program operation gained national attention and prompted public discussion of the role of college football and athletic programs on college and university campuses. In 1905, the deaths of 18 football players and 143 injuries of additional athletes created a widespread demand for reform from university administrators and faculty members (Beyer & Hannah, 2000; Smith, 1988; Thelin, 1996). Aware of the growing discontent over the state of college athletics and concerned for the welfare of student-athletes, Theodore Roosevelt intervened to facilitate discussions regarding reform and athletic regulation. In March 1906, in an effort to structure intercollegiate athletics and enforce regulations to ensure parity amongst participating universities, 62 institutions formed the Intercollegiate Athletic Association of the United States

(IAAUS) (Bass et al., 2015). The organization sought to develop rules, ensure compliance, and preserve the notion of amateurism in intercollegiate athletics. In 1910, the organization became the National Collegiate Athletic Association (NCAA), which today serves as the governing body for intercollegiate athletic programs across the nation.

While the IAAUS and affiliated members worked to reform intercollegiate athletics, and succeeded in creating a formalized structure to regulate athletic programs, issues of coaching corruption, illicit recruiting, and growing commercialism continued to plague institutions. By 1925, following numerous requests from the NCAA for assistance investigating errant football programs, the Carnegie Foundation published an initial report regarding the state of college athletics. Dubbed the “Twenty College Report,” the preliminary investigation, led by Howard Savage, cited a lack of institutional control and absence of strong presidential oversight as the two key factors perpetuating questionable management of athletic programs. Three years later, the Carnegie Foundation released the “Savage Report,” which echoed and extended the initial findings of the Twenty College Report (Smith, 1988; Thelin, 1996). In addition to detailing the scope of infractions prevalent at the time, which included pay-for-play recruitment processes and questionable fundraising practices, the report also listed institutions found in violation of standards of conduct in these two areas. Of the 130 institutions included in the report, only 28 universities appeared to promote “clean” athletic programs (Watterson, 2000). Researchers (Byers & Hammer, 1995; Thelin, 1996; Wiggins, 1995) have maintained that university administrators felt pressure from stakeholders to continue to grow athletic programs, and influence from head coaches, alumni, and athletic supporters began to affect the governance of athletic programs, ultimately shifting locus of control from institutions to external

constituencies. The 1929 Carnegie Report represented a landmark study addressing the state of intercollegiate athletics and foreshadowed issues that became more deeply seeded as time progressed (Bailey & Littleton, 1991). Over the next thirty years, colleges and universities saw greater expansion of intercollegiate sports beyond big-time football, and as additional programs emerged, concerns of athlete recruitment and institutional oversight became increasingly more pervasive.

Researchers (Bass et al., 2015) argued that these ever-present concerns reached new levels with the introduction of two key factors: the development of NCAA athletic divisions and the emergence of cable television. These large-scale changes dramatically altered the financial landscape of intercollegiate athletics, as access to resources and disparities between institutions became more pronounced. Additionally, the changes intensified the system of win-based financial incentives and enhanced competition for resource attainment (Bailey & Littleton, 1991; Thelin, 1996; 2000). Through the creation of NCAA divisions in 1973, institutions became classified for competitive play based on resource attainment. Although questions of institutional inequity with regard to athletics have remained at the forefront of issues among athletic programs, NCAA division classification brought forth a new benchmark for program success. Division I programs represented top revenue producers and the largest athletic budgets of institutions affiliated with the NCAA, whereas Division II and Division III programs operated on small budgets, with very few scholarship opportunities available for athletes. Division I institutions became representative of “big-time” athletics and classification as such created a series of competition-based opportunities for financial gains that did not apply to institutions classified in lower divisions. The stratification of intercollegiate athletics became

furthered by Division I sub classifications of I-A, I-AA, and I-AAA, which represented programs with the highest and lowest revenue stakes in Division I competition.

These designations gained increased importance as institutional and conference control of television rights shifted in the 1980s (Thelin, 1996). Following a 1984 anti-trust lawsuit against the NCAA, the organization lost exclusive rights to regular season football broadcasting rights, which allowed for individual universities and their affiliated conferences to negotiate media packages (Thelin, 1996). This drastically altered revenue streams for big-time programs, as universities saw greater athletic generated revenues associated with broadcasting rights and growth in institutional visibility associated with said coverage. For institutions within the highest NCAA classifications (Division I and later Division I-A), revenue streams reached all-time highs as multi-million dollar contracts with television networks become commonplace among big-time athletic programs, and previous gaps between financially sound athletic programs and those struggling to maintain grew exponentially. Researchers (Oriard, 2009; Sperber, 2000; Thelin, 1996) have argued that the increased capacity for revenue generation served as the catalyst for athletic scandal in the decades to follow, as institutions and their athletic programs stood to profit from success more so than in decades past.

By the 1980s, intercollegiate athletic programs had become synonymous with scandal. Rampant cheating, illicit behavior by coaches and student-athletes, and unethical conduct on the part of universities became staple headlines across media outlets. Media coverage of infractions gained prominence, as reports of misconduct at big-time institutions including The University of Miami, Southern Methodist University, The University of Oklahoma, North Carolina State University, and The University of Southern California illuminated student-athlete

athletic fraud, payments to athletes and their families, drug use, and weapons charges within intercollegiate athletic programs (Thelin, 1996). From 1980 to 1989, the NCAA sanctioned 109 colleges and universities, and more than half of the institutions cited for infractions fell within Division IA (Knight Commission on Intercollegiate Athletics, 1991). Provoked by the numerous NCAA investigations of big-time college athletic programs and efforts by the Presidents Commission of the NCAA, the Knight Foundation, a non-profit organization geared toward journalism and engaged community practices, established the Commission on Intercollegiate Athletics to review the extent of athletic program infractions and offer insights into managing the growing crisis. In 1991, the Knight Foundation released the first Knight Commission Report (Knight I), which illustrated the prevalence of misconduct and scandal in intercollegiate athletics and aimed to generate solutions with regard to reform. Researchers (Knight Commission on Intercollegiate Athletics, 1991; Smith, 2011; Staudohar & Zepel, 2004; Thelin, 1996; Watterson, 2000) have indicated that while the Knight I report included a review of violations across all Division IA sports programs, a strong pattern of severe, pervasive corruption occurred within men's basketball and football programs at large colleges and universities due to recruitment pressures, differential treatment of athletic programs relative to other areas of an institution, and the rise of "win culture" associated with large financial gains for successful programs. Knight I underscored the growing commercialization of college sports as a key issue facing athletic departments and their respective institutions, which echoed the historical concerns of college and university administrators, the Savage Report, as well as the Carnegie Foundation's 1929 report. However, corruption and violations seemingly intensified as the capacity for intercollegiate athletics to generate revenue expanded. Facing pressures to maintain a

competitive edge to advance their programs and promote their institutions relative to other universities, colleges and their athletic programs had become increasingly susceptible to the lures of revenue associated with enhanced commercialism and the need to win to sustain success (Staudohar & Zepel, 2004).

Perhaps the most significant attempt at reform to date, Knight I proposed reform enacted by institutional presidents. Researchers (Bailey & Littleton, 1991; Bok, 2012; Byers & Hammer, 1995; Duderstadt, 2000; Mitten, Musselman & Burton, 2009; Smith, 2011; Toma, 2008) have described the tumultuous relationship between institutional administration and intercollegiate athletics, as university presidents have struggled with management practices relative to the influence of prominent coaches and board perceptions of athletic governance. While the Knight Commission (1991) recognized the impossibility of mandating national standards for presidential oversight with regard to athletic programs, they emphasized the necessity of greater presidential involvement within the realm of athletics. Through the “one-plus-three” model, the Commission aimed to increase presidential oversight and control (one) over three key areas: academic integrity, financial integrity, and independent certification (Knight Commission on Intercollegiate Athletics, 1991). Bok (2012) suggested that college presidents, even those who maintained substantial oversight over athletic happenings, faced extreme resistance in their attempts to enact athletic reform, as pressures to enhance institutional prestige and revenue sources affected board and stakeholder conceptualizations of best practices.

Major Violations: Definitions, Incidence, Catalysts

Despite the notable progress made to regulate intercollegiate athletics and bolster

institutional control and presidential oversight, colleges and universities that sponsor big-time athletic programs continue to struggle with intercollegiate athletic scandals. Defined as violations that provide large-scale recruiting or competitive advantages, major infractions represent the most serious charges against NCAA Division I athletic programs. The NCAA (2015a) outlined nine primary university actions which constitute level I violations: (1) lack of institutional control, (2) academic misconduct, (3) institutional failure to cooperate with NCAA investigation, (4) individual unethical or dishonest conduct, (5) head coach violations, (6) pay-for-play, (7) third-party recruiting violations, (8) intentional disregard for NCAA regulations and intentional violations, and (9) collective level II and level III violations, which as an aggregate, constitute more egregious rule violations. While the NCAA (2015a) has documented infractions and sanctions, researchers (Cullen et al., 1990; Duderstadt, 2000) have noted that university administration and athletic personnel witness infractions, those reported and those that remain undetected, first hand. Athletic coaches stated that roughly a third of Division I football programs engage in behaviors that violate NCAA standards on a routine basis, and that half of the programs within the division committed a major infraction, reported or not, within the previous five years (Cullen et al., 1990). The real and perceived prevalence of scandal and abuses within big-time intercollegiate athletics are long standing and serve as symptoms of larger problems associated with intercollegiate athletic governance and finance.

Researchers (Bass et al.; Duderstadt, 2000; Knight Commission on Intercollegiate Athletics, 2001; Thelin, 1996; Yost, 2010; Zimbalist, 1999) have argued that the pervasiveness of major violations coincides with the large economic returns associated with successful big-time athletic programs, thus reifying the need for winning, revenue-generating teams. Given that

revenue generation with regard to intercollegiate athletics is contingent upon the ability to optimize ticket sales, alumni-athletic financial relationships, as well as conference and division positioning relative to post-season play, athletic programs face pressures to “win at all costs” (Cullen et al., 1990; Duderstadt, 2000; Guttman, 1991; Lumpkin, 2015; Thelin, 1996; Weston, 2011). Cullen et al. (1990) found that college football coaches cited pressures to win as the number one contributor to NCAA violations and that an emphasis on success from institutions and external constituents affect all big-time athletic programs. For coaches, program viability serves as an indicator of job performance, and threats to win-loss records represent a strong predictor to a coach’s likelihood of being fired by an athletic program (Holmes, 2011).

Researchers (Clark & Batista, 2009) provided additional support for the notion that institutional desire to maintain a competitive edge plays a substantial role in the occurrence of major violations. Over the past 30 years, FBS athletic programs committed 60% of all major infractions within Division I across all designations (FBS, FCS, D1 no football). Within the FBS, football and men’s basketball programs collectively committed 229 of the 290 major infractions, with “Power Five” football and “Power Seven” basketball teams responsible for roughly 85% of all major violations within the FBS, 74% of all FBS recruiting violations, 68% of all ethical conduct within the FBS, and roughly 69% of illicit awards and gifts violations within the FBS (NCAA, 2017a). With access to the largest athletic budgets in the country, greatest revenues associated with NCAA and conference post-season payouts, and the most active fan bases relative to ticket sales, these institutions maintain the largest economic stake in program successes. For these big-time programs, violations, particularly related to recruiting, may create a competitive edge for success in that institutions maintain high-quality players, which in turn influences on-field

production, thereby increasing opportunities to obtain larger shares of market revenues. As a whole, intercollegiate athletic programs' decisions to slight NCAA rules and regulations largely stem from economic gains associated with violations, as cheating without being apprehended yields high financial and non-financial returns (Depken & Wilson, 2006; Humphreys, 2012). However, if detected, institutions face punishments that far exceed economic gains associated with success related financial gains (Hughes & Shank, 2005; 2008; Winfree & McCluskey, 2008).

NCAA Enforcement and Sanctioning

The NCAA serves as the official enforcement body for member athletic programs. Affiliated institutions agree to abide by regulations codified by their respective divisions as outlined by the NCAA division manuals, and athletic program eligibility hinges on an institution's ability to comply with division rules. In instances of alleged misconduct, the NCAA committee on infractions and affiliated enforcement staff oversee the reporting, investigation, and sanctioning processes for all intercollegiate athletic violations of member institutions (NCAA, 2015a). Once enforcement staff receives violation allegations and determines the necessity for investigation, the NCAA contacts the president or chancellor of the offending institution to inform the university of its obligation to comply with the NCAA investigation. If the NCAA can substantiate violations, an institution is presented with a notice of allegations and the NCAA enforcement staff coordinates with the university and the athletic department to conduct personnel interviews and collect relevant correspondence, records, and other pertinent data (NCAA, 2013b, 2015a). Pending the results of the investigation, institutions then receive a notice including official sanctions to be enforced by the NCAA designed to remedy the

illicitly obtained financial and nonfinancial benefits that the offending program may have received via misconduct. The NCAA enforces the most severe form of punishments for major infractions (Level I violations), including fines, loss of scholarships, probation, recruitment restrictions, head coach restrictions, limited television exposure, bowl bans and, in the most extreme cases, program closure (NCAA, 2015a). Depken and Wilson (2006) outlined revenue and recruiting reductions as the two primary economic functions of NCAA punishments. By reducing revenue gains through punishments including post-season bowl bans, fines, and limited television exposure, the NCAA attempts to account for wrongly attained monetary gains resulting from rule violations. Furthermore, recruiting restrictions limit the scope and quality of new recruits, which directly impacts program prestige and financial aid availability for student-athletes. As a result, teams may suffer in quality as a lower profile team and less prestigious program deter top recruitment prospects, thereby limiting future revenue gains through win-based incentives (bowl games, conference championships, and heightened ticket sales). This, in turn, creates negative financial ramifications for the respective institutions. Division I institutions sanctioned by the NCAA for major infractions incur financial penalties on top of steadily increasing operating costs, and because a majority of Division I athletic programs operate in a deficit, institutional subsidy further increases to compensate for violations.

Organizational Crisis

Athletic violations, institutional investigations, and NCAA sanctioning constitute an organizational crisis, whereby offending universities and their athletic departments must manage fallout and attempt to control damage resulting from wrongdoings. Coombs (2014)

defined crisis as an organizational scandal whereby violations occur that threaten stakeholder expectations of normative organizational behavior. The lack of congruency between organizational espoused versus enacted behaviors fosters uncertainty and undermines organizational trust for stakeholders, and, as a result, threats to organizational legitimacy arise. For institutions, emergent crisis creates potential for negative or undesirable outcomes on both financial and public relations fronts. Researchers (Coombs, 2004; 2014; Dean, 2004; Holladay, 2012; Ulmer, 2001) have emphasized the importance of organizational response in renegotiating relationships with stakeholders and restoring balance with regard to public perceptions of institutional legitimacy. Ulmer (2001) indicated that the organizational-stakeholder relationship is a crucial area of crisis management focus for institutions, as stakeholders serve as external resources for organizations, and appropriate management of scandal can sustain relationships. However, institutions must engage in purposeful decision making in order to take steps toward corrective action. Dean (2004) echoed the importance of intentional, appropriate responses to scandal, as organizational reputation and image, no matter how positive, did not spare an organization from negative fallout associated with wrongdoing. Responses to scandal gain additional significance for institutions with a history of repeated crises. When an institution engages in a pattern of illicit or unethical behavior, threats to organizational legitimacy and public image become more high-stakes than for institutions without repeat offenses.

Alumni Stakeholders

Intercollegiate athletic scandal may impact university alumni, which represent a key

stakeholder population for higher education institutions (Grimes & Chressanthis, 1994; Hughes and Shank, 2008). Big-time intercollegiate athletics serve as a basis for (re)establishing relationships between alumni and their alma mater. The combination of institutional visibility of athletic media coverage and campus-alumni connection via attendance at athletic-related events provides a vital connection for relationship sustainment (Duderstadt, 2000). Because intercollegiate athletics afford a sense of institutional connection that other departments on university campuses cannot cultivate, stakeholders oftentimes base perceptions on experiences with athletic programs (Roy et al., 2004). This notion may become problematic for institutions investigated by the NCAA for athletic program violations. Athletics play a crucial role in relationship sustainment with alumni and because alumni's overall perception of an institution post-graduation may be partially predicated upon the status of an institution's athletic department, incidence of scandal introduces a negative component into the university-alumni relationship. Thus, NCAA violations and subsequent investigations may pose a threat to the ties between external constituencies and a university. The (mis)behavior of big-time athletic programs may call into question the institution's ability to effectively monitor athletic department functions. Given the extrapolation of such perceptions to the university as a whole via the notion of surrogate indication, whereby alumni utilize athletic performance as a marker of institutional viability, athletic scandal may also jeopardize alumni perceptions of said institutions (Roy et al., 2004; Winfree & McCluskey, 2008). Violations, then, may serve as a breach of trust in the alumni-institution relationship, which bears serious financial implications for both athletic departments and the institution as a whole.

A small body of research addresses the financial impact of NCAA infractions and

subsequent sanctioning, but the findings and scope of the studies prove limited with regard to understanding larger patterns across violating institutions. Grimes and Chressanthis (1994) addressed alumni charitable giving to academic programs at Mississippi State University over a thirty-year period and found that NCAA sanctions and resulting probationary status negatively affected alumni giving by \$1.6 million, with declines most strongly correlated with football misconduct. This finding appears in alignment of Rhoads and Gerking's (2000) examination of giving trends across 87 institutions over ten years, as institutions with men's basketball teams placed on probation experienced an average decline in giving of \$487 per student (13.6% decrease per student). However, similar results did not hold true for football programs, as probation did not yield significant changes in alumni giving trends. Hughes and Shank (2008) extended the discussion of intercollegiate scandal and charitable contributions through their study of fifteen institutions in violation of NCAA rules between 2000 and 2003. Their findings proved mixed, as ten institutions experienced immediate decreases in total charitable support, whereas giving at five institutions increased in the wake of scandal. While their conclusions regarding giving trends post-scandal contributed to a mixed body of research, Hughes and Shank (2008) expanded previous work to note the long-term impact of scandal on overall institutional charitable giving. Of the ten institutions negatively affected by athletic scandal, half failed to recover to pre-scandal levels of total charitable giving and two additional institutions showed slow increases in economic recovery, with pre-scandal giving rates re-attained at two or more years post-scandal. The authors argued that while findings related to alumni giving and intercollegiate athletic scandals remain inconclusive, the consideration of fiscal recovery and long-term charitable giving trends might lend support for the study of intangible components

associated with scandal. Factors including negative institutional image and loss of prestige represent tangential ramifications of NCAA violations and investigations, which may contribute to financial costs of scandal that extend well beyond the violation incident.

Limited research exists questioning potential fiscal effects of intercollegiate athletic scandal. Padilla and Baumer (1994) noted that on average, big-time football and men's basketball programs sanctioned and penalized for NCAA violations faced marginal adverse financial effects from a short-term perspective, as these institutions saw slight decreases in athletic generated revenue. From a longitudinal perspective, these institutions yielded larger athletic profits than non-violating universities. Goff's (2000) discussion of the effects of NCAA scandal on profits provides contextualization for these findings, as negative publicity associated with NCAA scandal and sanctions appeared to negate previous successes with regard to image, but did not produce spillover effects beyond neutralizing the impact of historical wins. Thus, positive institutional image of the violating athletic program may be decreased as a result of scandal. However, the fiscal ramifications may not outweigh historical successes with regard to athletic generated revenues. While researchers have addressed alumni stakeholders in particular relative to NCAA scandals and sanctioning, findings from the studies appear limited with regard to generalizability. The few available studies utilize varying definitions of charitable contributions, ranging from alumni giving to total charitable contributions, which include consideration of foundations, corporations, as well as alumni and non-alumni donors. Varying definitions of scandal also limit the generalizability of these studies to the larger context of Division I big-time athletic programs, as Rhoads and Gerking (2000) focused on probation as a predictor of alumni giving patterns, whereas other researchers (Goff, 2000; Grimes &

Chressanthis, 1994) included violations from singular incidents at two institutions and author-derived standards for scandal independent of NCAA standards (Hughes & Shank, 2008). This places limitations on how to contextualize giving patterns relative to athletic incidents. Furthermore, none of the studies considered scandal from the perspective of institutional response to violations. University presidents bear responsibility for athletic programs as a component of the overall institution. Decision-making processes, therefore, likely reflect larger institutional goals and objectives as well as needs to maintain valuable connections to resources from both financial and non-financial perspectives. Researchers (Hughes & Shank, 2008; Winfree & McCluskey, 2008) have also indicated the importance of addressing stakeholder outcomes in relation to university efforts to mitigate or control post-violation fallout. This area warrants further consideration, given that organizational behavior in the wake of scandal functions as a vital predictor of stakeholder fallout and financial damage control (Coombs, 2004; 2014; Dean, 2004; Holladay, 2012; Ulmer, 2001; Winfree & McCluskey, 2008).

Presidential Control

The large-scale reach of intercollegiate athletics requires careful consideration of the role of presidential oversight as athletic programs represent a vital tool for resource development and institutional legitimacy. Duderstadt (2000) argued that big-time athletic programs offer university presidents platforms for institutional advancement absent from other functional areas on campus, but also pose the greatest liability with regard to organizational image and reputation. As a whole, university presidents maintain a vested interest in the state of on-campus athletic affairs. The Knight Commission on Intercollegiate Athletics (2009b)

reported that presidents conveyed concern over growing themes of commercialization, market-driven arms races, and the associated “win at all costs” culture pervasive within big-time athletics. Despite unease regarding the ability to affect broad-based policy change at the national level, presidents expressed a commitment to maintaining program integrity at their respective institutions and within their conferences. Researchers (Duderstadt, 2000; Toma, 1998, 1999) have highlighted the role of intercollegiate athletics on college campuses, particularly with regard to student engagement, community support, and institutional visibility. Given the financial and non-financial benefits associated with big-time athletic programs, institution presidents and administrators oftentimes use intercollegiate athletics as a means to advance a university via perhaps the most highly visible outlet for an institution (Toma, 1998).

These fringe benefits may be most evident in university efforts for charitable giving as well as state allocated subsidies to institutions. Big-time athletics provide university administrators, particularly presidents, with a vehicle for advancing university-wide fundraising efforts. Through the utilization of luxury amenities and donor-specific experiences including access to suites, on-field access, as well as ticket/seating related incentives, university administration engage donors via the most accessible outlet for the institution and in turn, establish the basis for or strengthen pre-existing donor-university relationships (Toma, 1999, 2003). Given the increased emphasis on charitable giving within higher education as a result of declining state subsidies, the role of athletics in aiding university administrators’ abilities to raise funds is a key contributor to the diversification and sustainment of institutional resources (Cheslock & Gianneschi, 2008; Drezner, 2011). Researchers (Alexander & Kern, 2010; Humphreys, 2006; Jones, 2015) have also linked big-time athletic programs to university receipt

of state subsidies. Humphreys (2006) analyzed state appropriations at 570 institutions across 20 years and found between a 3% and 8% increase in appropriations in the year directly following a successful football season. Alexander and Kern (2010) also supported the claim that increased annual state subsidies follow successes in Division I football and men's basketball during the previous season. State-supported institutions garnered an additional \$1.1 million and \$797,000 in state subsidies for each win in football and men's basketball, respectively. These findings increase the overall indirect financial impact of intercollegiate athletics on a university and underscore the role of big-time sports in building institutional visibility not only with external stakeholders, but with state legislators as well.

Duderstadt (2000) highlighted the unique role of athletics on a college campus in that revenues and expenditures associated with many programs constitute a small portion of an institutional budget relative to total institutional revenues and expenditures, thus contextualizing athletic programs as a minor financial cog within the larger institutional machine. An exception to this statement lies within power conferences such as the SEC or Big 12 where the high net generated revenues and associated expenditures constitute a large portion of operating budgets at the institutional level. For institutions that do not boast the top grossing athletic programs in the nation, large-revenue producing outlets including hospitals and major research initiatives tied to grants and national organization affiliation represent major areas of institution focus and the financial impact of athletic specific revenues and expenditures pale in comparison to total operational budgets of other functional areas. However, the heavy media coverage associated with big-time athletic programs and large-scale reach with regard to external constituencies create local and national platforms for institutional

visibility and legitimacy not necessarily present in other functional units on campus, which in turn, affects all facets of a university (Duderstadt, 2000). These overarching indirect benefits of athletic programs, which tie into institutional prestige and external relationship development, heighten the importance of intercollegiate athletics for institutional presidents in the management of an institution and its reputation. The ability to wield athletic benefits for larger institutional good, however, remains contingent on athletic program compliance with NCAA regulations.

In the event of large-scale athletic misconduct warranting NCAA investigation for major infractions, presidential oversight, particularly with regard to fall-out management, is vital to the sustainment of institutional legitimacy and mitigation of potential financial repercussions. For institutions, athletic scandal and the associated organizational crisis jeopardize an institution's standing from both a monetary and non-monetary perspective as institutional image falls prey to questions about oversight and ethical practices and resources may become threatened as a result of damaged relationships with stakeholder groups (Coombs, 2014). Given the pervasiveness of potential benefits generated by intercollegiate athletics relative to the overall university, university presidents face major crisis with regard to external perceptions of the vitality of their institutions in the wake of athletic scandal. As the public faces of universities, presidents must react to crisis and effectively neutralize negative reactions from internal and external constituencies in order to restore organizational homeostasis and reorder institutional positioning within the broader environment. Institutional presidents must effectively address the concerns of stakeholders in order to preserve relationships from a resource sustainment perspective while also managing the potential impact of NCAA sanctions

from both a financial and non-financial standing. Furthermore, university presidents must also ensure organizational congruence with normative standards for athletic scandal management as peer-institution dictated norms affect an institution's standing within the field of higher education.

Institutional Self-Sanctions

Beginning in 1976 with the University of Minnesota, the implementation of self-sanctioning has become routine within collegiate athletics (Winfree & McCluskey, 2008). Today, roughly 69% of universities issue institutionally imposed athletic punishments in the wake of NCAA violation investigations (Winfree & McCluskey, 2008). Winfree and McCluskey (2008) defined post-apprehension self-sanctions as university implementation of punishment(s) for athletic infractions after reporting violations to the NCAA, but prior to NCAA punishments and mandates. The self-sanction process serves two purposes for institutions: mitigation of NCAA sanctions through optimization of self-punishment and management of public image during the NCAA investigation. This post-apprehension self-sanction allows for institutions to choose punishments to address infractions in a carefully crafted manner to prevent large-scale revenue loss. For highly visible, high profile teams, opting for recruitment reductions and probationary status for a given period of time may help curb revenue loss that would potentially accompany post-season bowl bans and media bans. By assuming a proactive role in the sanction process, institutions hope to influence NCAA sanctions and mediate the financial severity of official punishments (Winfree & McCluskey, 2008). In addition, institutions seek to control narratives associated with reports of NCAA infraction allegations and attempt to utilize self-sanctions as a

signal of compliance with investigations and commitment to NCAA standards of practice aimed to sustain stakeholder relationships. In 2012, the NCAA adopted Bylaw 19.9.4 “Mitigating Factors” and stated that final issuance of sanctions for violating institutions may be offset by “prompt acknowledgement of the violation, acceptance of responsibility and (for an institution) imposition of meaningful corrective measures and/or penalties” (NCAA, 2015a, p. 324). This statement codified the normative practice of institutional self-sanctioning and in turn, self-sanctions became a tool for institutions to strategically manage involvement in the punishment determination process.

Popular media outlets have made NCAA infractions and subsequent sanctioning processes more visible to higher education stakeholders than ever before, resulting in an emerging dialogue of institutional investigation best practices in the wake of athletic violations. In 2011, The University of Miami football program, upon reporting numerous NCAA recruitment violations and infractions related to amateurism, issued self-sanctions to address violations that included a two-year (2011 and 2012) bowl ban, ineligibility for the Atlantic Coast Conference (ACC) title game, and reduction of football scholarships offered to incoming recruits. Heralded as a strategic move to minimize losses from a lack of television exposure or long-term bowl bans, The University of Miami mitigated NCAA sanctions and was placed on a three-year probation in addition to the loss of nine scholarships (Adelson, 2013). Another prominent case emerged in 2013, as *Sports Illustrated* released an exposé on allegations of Oklahoma State University (OSU) football program’s inappropriate recruiting, financial, and eligibility practices from 2001 to 2007. OSU issued a public statement regarding the severity of the allegations and subsequently contracted a former NCAA compliance official to manage the institutional

investigation process (Oklahoma State University, 2013). OSU immediately began proactive internal investigations and issued a written commitment to punishment enforcement contingent upon findings. In 2014, the institution created a website specifically directed at addressing the violation allegations through statements from the institutional president, vice president for athletics, chair of the OSU Board of Regents, as well as head football coach, Mike Gundy, which expressed institutional interest in addressing and correcting any program wrongdoing (Oklahoma State University, 2013). While the NCAA could not substantiate many of the initial allegations that appeared in the *Sports Illustrated* article, the institution was sanctioned for violations to the NCAA drug policy as well as major recruitment violations. Their pro-active stance, however, lessened the punishments inflicted on the institution via the NCAA, and resulted in one year of probation, \$8,500 fine, and suspension of an athletic pride organization (NCAA, 2017a). Athletic scandals have similarly affected men's basketball programs, with the most prominent completed NCAA investigation involving Southern Methodist University. In 2015, the NCAA determined that the program violated ethical standards, engaged in academic misconduct, and head coach Larry Brown showed intentional unethical conduct and failure to create a culture reflective of NCAA standards (NCAA, 2017a; O'Neil, 2015). The institution quickly released a statement that detailed self-sanctions, which included: reduction of two scholarships, restriction of recruitment activities, limiting the number of prospective student visits as well as communication between staff and prospective students, and allocation of additional staff/resources to ensure future compliance (Southern Methodist University, 2015). Self-sanctioning may have curbed direct financial penalty, but the NCAA issued a three-year probation in addition to a ban on men's basketball post-season play,

vacation of a series of wins, and a nine-game suspension for Brown, all of which may have reduced indirect institutional benefits (NCAA, 2017a). These examples of NCAA infraction management illuminate Winfree and McCluskey's (2008) notion of self-sanctions as a means of punishment optimization. Through this approach to self-sanctioning, institutions choose punishments that will likely meet NCAA standards for severity while minimizing areas of penalty that result in large-scale financial losses for the respective institution. In the case of The University of Miami, additional bowl bans or loss of televised coverage would have resulted in large-scale revenue loss for the institution, and through the adoption of a self-imposed bowl ban, the school was able to mitigate the severity of additional punishment through the show of good faith.

Winfree and McCluskey (2008) provided a preliminary discussion of the impact of post-apprehension self-sanctions in relation to NCAA scandals. However, their model for punishment failed to address the potential impact on institutional stakeholders. Researchers (Kelley & Chang, 2007) advocated for a greater understanding of university scandal relative to key stakeholder groups, as unethical behavior on the part of colleges and universities may erode notions of public trust. This assertion gains increasing importance with regard to crisis management of NCAA scandal and the need for organizations to address wrongdoings in an intentional manner. Given the link between institutional advancement and alumni charitable giving, in addition to the role of athletics in developing alumni affinity and involvement, alumni represent a stakeholder population that warrant special consideration in relation to NCAA violation management. If institutions engage in self-sanctioning as a method to control

university image and/or stakeholder fallout in the wake of athletic scandal, future research must address the efficacy of this organizational behavior.

Theoretical Considerations

Resource Dependence Theory

Researchers (Bastedo & Bowman, 2011; Leslie et al., 2012; Tolbert, 1985) have emphasized the relevance of resource dependence theory in analyzing the relationship between organizational decision-making and the need for the development and sustainment of resource diversification within higher education. Per this theoretical lens, organizational survival and power maximization depends on the ability to maintain stable exchanges with external revenue sources (Pfeffer & Salancik, 1978). Underscoring this theory is the notion that the environment contains scarce, valuable resources required for an institution to operate effectively (Pfeffer & Salancik, 1978). Scarcity necessitates organizational reliance on multiple exchange-based relationships in order to ensure greater stability in resource flow. Through development and sustainment of avenues for resource acquisition, organizations become less contingent on a single source for institutional survival. Thus, organizations engage in practices and structure behavior to both sustain and enhance relationships with external constituencies through which resources are obtained as well as to reduce uncertainty regarding resource acquisition (Pfeffer & Salancik, 1978; Tolbert, 1985; Ulrich & Barney, 1984). Through this perspective, higher education institutions seek to optimize resource flow via diverse, expansive networks of external exchange-based relationships. With declines in state subsidies, public institutions have placed additional emphasis on the sustainment and expansion of resource

acquisition practices (Cheslock & Gianneschi, 2008; Drezner, 2006). By diversifying resource streams, institutions create a more stable economic climate whereby declines in more prominent resources (state subsidy) may be tempered via alternative funding sources. Researchers (Archibald & Feldman, 2011; Weisbrod et al., 2008) noted that private institutions, such as The University of Miami, also rely heavily on the diversification of resources as these universities receive little to no state or public funding. As a result, varied revenue streams, most notably via individual and corporate/foundation charitable giving and endowment earnings, gain significant importance in defraying institutional costs (Archibald & Feldman, 2011; Weisbrod et al., 2008).

Kelley and Chang (2007) utilized resource dependence theory as a lens for better understanding the rationale for athletic scandal in higher education. They argued that athletic violations occurred as a function of resource dependence, as universities and their athletic programs are competing for scarce resources in the form of charitable contributions, and engaging in illicit practices allowed for a competitive edge creating opportunities for increased financial gain. This assertion provides a logical framework for understanding the root of athletic scandal, but I argue that it may also function as a crucial perspective in understanding institutional response to NCAA scandal and subsequent investigations. Universities engage in resource dependent practices in that they operate within a larger field characterized by scarce resources and institutional viability hinges upon acquisition and development of varied resource streams. For universities as a whole, declines in state subsidies have shifted emphasis on revenue attainment to external sources, and institutional advancement and fundraising efforts have become more prominent than ever before. Similarly, revenues related to big-time

athletic programs are contingent upon a program's ability to compete for limited resources in the form of alumni contributions, conference and NCAA payouts, and ticket sales, and the procurement of said resources is vital to the operation of athletic programs, particularly given the market driven trends related to expenditures. To sustain resource flow, both universities and athletic programs must maintain stable ties to external constituencies. However, these exchange-based relationships may become compromised by NCAA violations and sanctions. Kelley and Chang (2007) argued that scandal might foster public mistrust of an institution, thus hindering alumni stakeholder relationships. If considered relative to the role of athletics in building relationships with alumni, and given the notion of athletics as a surrogate indicator of overall university well-being, violations and subsequent sanctions have the potential to jeopardize resource flow for not only athletic departments, but for the institution as a whole.

Thus, institutional self-sanctions may function as a means to sustain external ties and, in turn, resources in the wake of NCAA violations and subsequent investigations. If organizations structure behavior in accordance with uncertainty reduction regarding resource attainment and actively seek to maintain ties to diverse resources within the larger environment, the introduction of an unforeseen, negative organizational action may disrupt the resource network in place. As a result, uncertainty arises as negative organizational behavior may call into question organizational relationships with stakeholders, which represent vital resources for sustainment. Pfeffer and Salancik (1978) indicated that sustainment of resource flow underscored organizational behavior and in the event of unforeseen organizational misconduct, organizations may actively respond in a manner that seeks to mitigate damage and ultimately maintain ties to resources.

In the wake of athletic misconduct and NCAA investigations, institutional self-sanctions may serve as a practice to maintain external exchange-based relationships, thus sustaining organizational ties to resources. Through self-determined punishments aimed to address athletic wrongdoing, university administration put forth a show of good faith with regard to appropriate management and oversight practices (Winfree & McCluskey, 2008). In doing so, university presidents and associated administrators seek to stabilize ties to resources jeopardized via the introduction of uncertainty in the form of athletic scandal. Winfree and McCluskey (2008) argued that while institutional self-sanctions may not prevent additional NCAA sanctions, engagement in said practice allows an institution to manipulate areas of financial impact associated with scandal, thus circumventing punishments in key financial areas for the institution via self-correction. Given the potential for scandal to hinder relationships with organizational stakeholders, and the increasing importance of alumni as a resource stream for both universities and athletic departments, university presidents' enactment of institutional self-sanctions may serve as a form of resource preservation, particularly with regard to alumni charitable giving.

Neo-Institutional Theory

Neo-institutional theory provides a secondary framework in the discussion of institutional self-sanctioning. Rather than utilize institutional self-sanctions as a function of resource sustainment, university administrators may implement punishments based on behaviors of peer institutions and normative standards in order to preserve institutional legitimacy within the respective organizational field. Specific groups of institutions that share

similar characteristics, resources, and pressures comprise an organizational field. Through the neo-institutional lens, member organizations align their behaviors in accordance with taken-for-granted field norms and standards largely dictated by professional standards within the organizational field (DiMaggio & Powell, 1983; Powell & DiMaggio, 1991). When faced with a specific environmental context, institutions model organizational structures, decision-making, and behaviors with peer institutions in order to preserve legitimacy and adhere to standards codified by the professional field (DiMaggio & Powell, 1983; Leslie, Slaughter, Taylor, & Zhang, 2012; Powell & DiMaggio, 1991; Tolbert, 1985). Researchers (DiMaggio & Powell, 1983; Powell & DiMaggio, 1991) have argued that, over time, these similar decision-making processes foster homogeneity amongst institutions within an organizational field, as the similar environmental contexts faced by member organizations and adherence to field norms and rules elicit like behaviors by institutional administrators. In turn, member institutions begin to take on characteristics similar to other organizations within the field, and the behavior of peers becomes a standard for organizational legitimacy with regard to decision-making. The resulting isomorphism, or organizational homogeneity, becomes the impetus for organizational behaviors, despite the potential costs associated with efficiency of such behavior (Tolbert, 1985). Failure to comply with field and peer-dictated standards may allow for organizations to move forward in an innovative manner, but also increases the likelihood of a threat to organizational legitimacy, which results in the loss of prestige or organizational membership within the respective field.

Toma (2010) argued that decision-making regarding intercollegiate athletics may be best understood via neo-institutional theory. For universities, the pursuit of institutional

legitimacy drives organizational decision-making in all areas, as institutions seek to maintain a status that ensures competitive standing with peer institutions. Tendencies toward isomorphism prompt institutions to engage in similar behaviors in order to maintain standing within their peer designation and emphasis remains on the preservation of institutional prestige in order to ensure organization viability (DiMaggio & Powell, 1983). With regard to intercollegiate athletics, NCAA classifications of FBS or Division I group member institutions into an organizational field whereby all the universities within each respective classification face similar environmental pressures and opportunities associated with their status as a big-time athletic program. Member universities align behavior based on both NCAA standards and field-specific norms regarding athletic program governance and best practices. As a result, institutions within Division I athletics appear relatively homogenous in terms of program management and institutional response to varying situations, as pressures to model behaviors in a manner consistent with norms predict organizational response.

Violating institutions, faced with a threat to institutional legitimacy via negative organizational behavior must determine the most appropriate course of action to address athletic deviance from codified standards of practice. Failure to respond to athletic scandal may jeopardize a university's standing within a conference, NCAA division, or among peer-institutions, as the maintenance of a compliant program and university administration commitment to upholding appropriate athletic conduct represent normative practices within intercollegiate athletics. To the other extreme, institutions facing NCAA investigations for major infractions cannot disband athletic programs in response to violations and scandal without large-scale repercussions with regard to institutional standing relative to peers and their

respective organizational field. Researchers (Roy et al., 2008) indicated that external constituencies view lower-tier athletic division affiliations as less prestigious than Division I membership. Institutions within Division I athletics typically maintain large overall operating budgets, large student bodies, and increased access to a wider spectrum of institutional resources. Thus, disassociation with Division I athletics may jeopardize an institution's standing in terms of prestige and legitimacy, as institutions would no longer be characterized amongst peers considered as highly competitive on a national level.

Institutional self-sanctions may represent means for university administrators' need to sustain institutional legitimacy. Researchers (Winfrey & McCluskey, 2008) reported that roughly two-thirds of institutions charged with major infractions utilized self-imposed punitive punishments as a means to atone for illicitly obtained competitive advantages and manage stakeholder fallout. If presidents and university administrators at offending institutions seek to engage in organizational behaviors that align with normative standards, thereby reestablishing legitimacy via actions normalized by the behaviors of like institutions, self-sanctioning allows for patterned behavior contingent upon the actions of peers. Engaging in self-sanctioning also prevents large-scale deviance associated with non-responses or restructuring of the role of athletics at an institution. By utilizing the normative behaviors of other institutions, university administrators ensure standing in relation to these institutions, accounting for norms while maintaining the legitimacy reaffirmed by sustainment of big-time athletics. However, the practice only results in avoiding NCAA addition of further punishments in 6% of cases (Winfrey & McCluskey, 2008). This furthers the application of neo-institutional theory in understanding the practice of institutional self-sanctions, in that organizations may engage in behaviors in

accordance with norms, despite the (in)effectiveness of said behaviors (Tolbert, 1985). In the case of institutional self-sanctions, institutions may engage in the practice to adhere to normative standards and tendencies toward homogeneity despite the fact that self-sanctions may not necessarily provide a financial benefit with regard to scandal fallout.

Through the application of resource dependence and neo-institutional theory, this study examined the function of institutional self-sanctions as an institutional response to NCAA major violations. This study addressed the incidence of NCAA major infractions among football and men's basketball programs, respectively, at Division I institutions as well as the relationship between institutional self-sanctions and alumni charitable giving. Winfree and McCluskey (2008) provided a baseline for conceptualizing self-sanctions as a practice by which colleges and universities aim to cultivate specific institutional responses following athletic scandal(s) and mitigate financial losses stemming from NCAA official sanctions. However, research to date fails to include financial impact of self-sanctioning behaviors as they relate to key organizational stakeholders. Through a resource dependence lens, university survival hinges upon the ability to create diverse networks for resource attainment, and with the increased emphasis on alumni support and charitable giving in higher education, threats to the relationship could pose threats to a large institutional resource. Thus, in the event of major NCAA athletic scandals, institutions may implement self-sanctions in order to preserve university-alumni relationships from a resource perspective. On the other hand, institutional self-sanctions may have emerged as a byproduct of an organizational field categorized by homogeneity. As a result, institutions become more similar as they seek to preserve legitimacy within the field. Failure to adapt and become more homogenous may allow institutions to set new standards for peers, but more

often than not dissimilar behaviors threaten institutional viability within a peer group and result in loss of prestige or legitimacy. In the case of athletic scandal, institutional self-sanctions may function as a normative practice for colleges and universities in violation of NCAA rules and regulations aimed to maintain organizational standing relative to like institutions. Thus, from this perspective, university utilization of self-sanctioning may not necessarily focus on financial sustainment, but rather the practice may serve as a marker of field-driven homogeneity.

The next chapter outlines methodological considerations for the proposed study. Through detailed discussion of data, sample institutions, as well as proposed analyses, Chapter 3 details the functional aspects of research design and execution.

CHAPTER 3

METHODS

This study addressed the incidence of NCAA major infractions amongst FBS football and Division I men's basketball programs as well as the impact of institutional self-sanctions within FBS football and Division I men's basketball programs, respectively, on alumni giving. Through the use of panel data and fixed effects analyses, this study examined the role of institutional self-sanctioning as an institutional response to athletic program major infractions, particularly with regard to management of alumni charitable giving. While researcher have suggested that self-sanctions have both economic and public relations functions, particularly with regard to stakeholder populations, this assertion has yet to be substantiated via empirical analysis (Winfree & McCluskey, 2008). This chapter outlines the methodological considerations surrounding this study and includes six sections: data, independent variables, dependent variable, sample, analytic strategy, and Institutional Review Board (IRB) procedures.

Data

This study utilized secondary data obtained via IPEDS, the CAE VSE survey, NCAA record books, and the NCAA LSDBi as the basis for understanding the impact of institutional self-sanctions on alumni charitable giving from fiscal year 2002-2003 through 2012-2013. Panel data combines cross-sectional and time series data as researchers record observations for multiple units, individuals, or organizations across a series of regular time intervals (Baltagi, 2005; Castilla, 2007; Frees, 2004; Wooldridge, 2013; Zhang, 2010). One particular advantage to panel data lies in the robustness of information comparative to cross-sectional data (Baltagi, 2005,

Zhang, 2010). While cross-sectional approaches, which rely on observations of multiple units at one point in time, prove pragmatic for some research designs, this form of data provides a narrow scope of analysis that effectively limits the use of said data to between-unit comparisons (Baltagi, 2005; Zhang, 2010). Zhang (2010) indicated that cross-sectional data proves best suited to studies comparing and contrasting institutions or institutional types rather than larger-scale consideration of trends over numerous years. However, panel data, through the combination of cross-sectional and time series data, facilitates long-term observations of multiple units and allows for researchers to determine the effects of trends and changes over longer periods of time. This broadens the scope of information collected, which provides a more complete picture of unit occurrences over time.

The crux of this study hinged upon potential changes in alumni charitable giving following policy-based organizational decision-making and as such, relied on within-unit variance to determine the impact on institutional resources over time. Analysis of change, institutional or individual, necessitates the use of panel data in order to effectively capture the impact of organizational decision making over time, as this approach to data provides a within-unit robustness of data not available via cross-sectional data alone. Researchers (Castilla, 2007; Halaby, 2004; Zhang, 2010) have underscored the greater depth of information gained via panel studies as an advantage in empirical analyses of policy within the fields of education and social sciences. Through comprehensive study of intra-organizational change, researchers, institutional administrators, and practitioners gain further insight into the effects of decision-making practices as well as short and long-term outcomes of said behaviors (Castilla, 2007; Zhang, 2010). Rather than rely on observational data from a singular year, administrators and

researchers can utilize panel data in order to identify the impact of specific policy related variables on outcomes and (re)assess the effectiveness of organizational decision-making practices. These objectives provided the foundational motivation for this study. Institutional self-sanctions in the wake of NCAA major violations represent organizational behaviors, and while the practice has become the primary institutional response for universities marred by scandal (Winfree & McCluskey, 2008), the lack of empirical investigation into outcomes with regard to charitable giving may result in institutional implementation of ineffective policies. In order to bridge the gap in existing literature regarding charitable giving and institutional self-sanctions related to major infractions in big-time athletic programs, the use of panel data provided a foundation through which to determine changes in giving contingent upon enactment of specific organizational behavior.

Integrated Postsecondary Education Data System (IPEDS)

Hosted by the U.S. Department of Education's National Center for Education Statistics (NCES), the Integrated Postsecondary Education Data System (IPEDS) catalogs annual higher education survey results in the following areas: institutional characteristics, institutional prices admission, enrollment, student financial aid, degrees and certificates conferred, student persistence and success, and institutional resources (National Center for Education Statistics [NCES], 2016). Roughly 7,500 institutions complete the annual IPEDS survey, which is mandated for all colleges and universities receiving or participating in federal student financial aid programs (NCES, 2016). Collectively, survey archives provide information regarding fiscal and economic trends in higher education across varying institutional classifications (state, research,

private religious, liberal arts, for-profit universities, community colleges, as well as vocational schools).

Voluntary Support of Education (VSE)

The Council for Aid to Education (CAE)'s Voluntary Support of Education (VSE) survey served as the source of fundraising data for this study. Established in 1957, the annual VSE survey and related publications have reported roughly 85% of data regarding charitable giving at public and private higher education institutions nationwide (CAE, 2015). The survey, funded by support from the Council for Advancement and Support of Education (CASE), includes self-reported data from participating institutions. Respondents utilize CASE developed reporting procedures to ensure standardization with regard to subject definitions, fundraising calculations, and inclusion/exclusion of various sources of revenue (Council for Advancement and Support of Education [CASE], 2009). The implementation of these guidelines and procedures for reporting allow universities and researchers to utilize VSE data to compare institutions using data derived from like metrics.

The survey collects institutional data regarding charitable contributions from participating institutions based on a July 1-June 30 fiscal year. For the 2017 VSE survey, institutions gained access to the VSE survey in June 2017, shortly before the close of the fiscal year, and submitted information by an October 2, 2017 deadline. The VSE staff then reviewed the data submissions and began preparing the 2017 publication and corresponding reports. The results from the survey will be released to the public in early spring 2018 (CAE, 2017b). While

the timeline for submissions and reporting varies from year to year, the 2017 survey timeline provides a basis for understanding the data collection process.

CAE distributes print and email requests for participation to two and four-year higher education institutions, amongst other schools, utilizing contact information on file with the organization. Response rate for the annual survey varies, however CAE (2015) indicated that a core group of between 875 and 980 institutions participate annually, allowing for longitudinal survey results for these institutions. After the October deadline, institutions may revise submissions based on updated financial data, and during the following January, CAE closes access to records in order to download and analyze data in preparation for an early spring report release (CAE, 2015). Data from the annual VSE survey is available for purchase, and access to previous VSE survey data was obtained via special inquiry.

NCAA Legislative Services Database (LSDBi)

Data regarding NCAA major infractions cases and self-sanctions was collected via the use of the NCAA Legislative Services Database (LSDBi). The NCAA LSDBi is a comprehensive database that catalogs all legislation, proposals, and major infractions for all NCAA divisions and designations from 1953 to present day (NCAA, 2017a). Through the major infractions query function of the database, users may search archived NCAA major infractions cases filtered by conference, institution, subdivision (Division I, Division II, and Division III), appeals, decision dates, case levels (level I or level II violations), and penalty type. Each case catalogued within the LSDBi contains an NCAA public report, which details, at length, violations, investigation procedures, penalties and sanctions imposed, inclusive of institutional self-sanction

designations, as well as a case timeline. This database provided data regarding violations that occurred during the timeframe of this study as well as a list of self-sanctions for institutions in violation of NCAA standards. Access to the database is public and no prior approval or verification of study was required to obtain the case data.

Independent Variables

FTE, FTE², Endowment per FTE, Total Revenues per FTE

Research Questions 2 and 3 addressed the relationship between institutional self-sanctions for major infractions in Division I FBS football and Division I men's basketball respectively. With regard to controlling for fiscal stratification and university size amongst institutions included in the analyses, full-time equivalent (FTE) students, FTE², endowment per FTE, and total revenues per FTE aided in accounting for factors that influence varying revenues associated with respective institutions. Researchers (Grimes & Chressanthis, 1994; Humphreys & Mondello, 2007) have identified these variables as useful measures relative to alumni charitable contributions, as student body size affects size of university alumni pool, endowment, and impacts revenues per student. Inclusion of these variables also contextualized this study within the broader literature related to alumni giving and the role of intercollegiate athletics. FTE assisted in controlling for the possibility that charitable contributions are the byproduct of large enrollment at a given institution, therefore suggesting the propensity for larger alumni bases. By controlling for this variable, institutional size was separated from the social process of self-sanctioning that this study attempted to further explicate. FTE was determined via query utilizing the IPEDS Enrollment Survey. Researchers (Leslie et al., 2012)

indicated that IPEDS definitions of FTE have varied over the last thirty years, and in their analysis, they computed the figure as the number of full-time students at an institution plus one-third of part-time students. They argued that this approach provided a means to standardize an otherwise varied measure of enrollment for universities, and as such, the same approach was employed in this study.

Inclusion of FTE² accounted for the potential for (dis)economies of scale with regard to alumni charitable contributions. Given the assumption that larger student bodies give way to a larger pool of students likely to later become university donors, FTE² held for instances of lower alumni giving levels relative to larger student bodies or higher alumni giving levels relative to smaller student bodies. Endowment figures were obtained via special request of data from CASE, as the organization acquired the VSE survey in 2018 (CASE, 2019). CAE (2015) defined endowment, as considered by the VSE survey, at market value and this provided the definition for endowment within this study in order to ensure parity with the data source. This data was accessed via special inquiry. VSE Senior Director Ann Kaplan provided a list of institutional identification numbers for all higher education institutions in the United States. These were matched to the samples used for each respective analysis and the VSE ID list was emailed to Kaplan. She then emailed an excel document containing endowment figures for the universities included within this study. All endowment figures, to control for institutional size, were divided by the modified FTE calculation to provide endowment in dollars per FTE figures. Total revenues per FTE student were derived from the IPEDS Finance Survey. Total revenues, inclusive of fees, appropriations, and auxiliary operations were divided by the modified FTE calculation employed in this study to provide a breakdown of total revenues in dollars per FTE.

Post-Season Play, Championship

While research fails to demonstrate definitively the relationship between big-time athletic program success on charitable giving to an institution, evidence exists suggesting that post-season play and championship via the NCAA tournament and national championship bowl game may impact alumni giving (Baade & Sandberg, 1996; Brooker & Klastorin, 1981; Rhoads & Gerking, 2000). Data on FBS football post-season play and championship status was obtained from the 2013 NCAA Division I Football Bowl Subdivision record book. The Bowl Championship Series (BCS) section details, at length, the outcomes of all BCS sponsored bowls (Fiesta, Orange, Rose, and Sugar) as well as the BCS national championship during the BCS era (1998-2013) at the time of publication. Mining the records for each year considered in the study allowed for denotation of post-season play or championship for bowl-eligible and BCS national championship institutions.

Division I men's basketball post-season play and championship status were obtained from the results of the annual NCAA men's basketball tournament. The annual NCAA Winter Championship Records publication lists the outcomes of the NCAA men's basketball tournament at all stages including the one-game play-in opening round, first round, second round, regional semifinals, regional finals, semifinals, and championship. Review of NCAA Winter Championship Records from academic years 2002-2003 to 2012-2013 allowed for designation of institutional post-season play and championship status for each university that received a bid to the NCAA men's basketball tournament and the championship winner for the corresponding year. Due to the unavailability of the 2010 NCAA Winter Championship Records online, tournament participation and championship was determined via the use of the 2010

Division I men's basketball championship tournament records. The database details individual tournament game outcomes as well as the championship round winner, and thus allowed for collection of the necessary data for the 2010-2011 season. As a categorical variable, post-season play/championship for each sport was coded utilizing dummy variables, whereby "0" indicated no post-season play appearance and/or championship status "1" indicated post-season play appearance and/or championship status.

Institutional Self-Sanctions

To access data regarding NCAA major infractions in Division I FBS football programs, the researcher utilized the query function of the LSDBi Major Infractions database to generate a search limited to cases within football programs at Division I FBS institutions that occurred between the 2002-2003 and 2012-2013 fiscal years. This parameter aligned with fiscal year determinations by VSE of June 30 to July 1, providing comparable timelines for financial and infraction data. Information regarding major infractions among basketball programs was obtained through the same search functions by the query to cases within Division I men's basketball programs that occurred between the 2002-2003 and 2012-2013 fiscal years. Information regarding institutional self-sanctions in the populated cases was obtained by mining public reports on infractions attached to each case profile. Each report contained a section labeled "Penalties," which outlined NCAA penalties that were imposed post investigation, but also indicated institutionally imposed self-sanctions if applicable. This designation allowed the researcher to denote institutional self-sanctions for each case derived from the Division I FBS football and Division I men's basketball queries. As a categorical

variable, institutional self-sanctions were coded as a binary indicator with “0” for no institutional self-sanction response and “1” for institutional use of self-sanction responses.

Dependent Variable: Total Alumni Giving

Research Questions 2 and 3 addressed the impact of institutional self-sanctions on total alumni giving to an institution. CAE (2015) defined this term as all giving from institutional alumni, restricted and unrestricted. In an attempt to maintain parity between research and data, alumni were defined as per the VSE and include all former students of an institution, regardless of academic career classification, who have earned credits toward a degree or certification, or have been granted a diploma by said university (CAE, 2015). Total alumni giving figures were obtained via special inquiry to CASE. Similar to endowment figures, VSE Senior Director Ann Kaplan provided a list of VSE institutional identification numbers that the researcher matched to the universities included in the two respective study samples. This list was emailed to Kaplan and she provided an excel spreadsheet listing alumni charitable giving figures for the associated institutions. Total alumni giving figures were divided by the modified FTE calculation in order to control for institutional size and figures reported in this study are alumni charitable giving dollars per FTE.

Table 1

Study Variables

Variable name	Definition	Source
Independent Variables		
FTE	Full-time students enrolled at an institution plus one-third of part time students.	IPEDS Enrollment Survey
FTE ²	Full-time students enrolled at an institution plus one-third of part-time students, squared; serves as a control for possible diseconomies of scale with regard to alumni charitable giving.	IPEDS Enrollment Survey; author calculations
Endowment per FTE	Institutional assets bequest via charitable contributions, which limit principal and surplus fund expenditure; divided by FTE calculation to determine a per-student figure. Reported as dollars per FTE.	VSE Survey
Total Revenues per FTE	Total resources attained via services provided including but not limited to fees, auxiliary operations, and appropriations; divided by FTE calculation to determine a per-student figure. Reported as dollars per FTE.	IPEDS Finance Survey
Post-Season Play	Division I Men's Basketball: Appearance in NCAA Men's Basketball Championship Tournament	NCAA Men's Basketball Championship Tournament Records, 2001-2013
	Division I FBS Football: Appearance in BCS Post-Season Bowl Game	NCAA Division I FBS Bowl/All-Star Game Records

Variable name	Definition	Source
Championship	Division I Men's Basketball: Winner, NCAA Men's Basketball Championship Tournament	NCAA Men's Basketball Championship Tournament Records
	Division I FBS Football: Winner, NCAA BCS National Championship	NCAA Division I FBS Bowl/All-Star Game Records
Institutional Self-Sanctions	Punishments self-imposed by an institution post-apprehension for NCAA major infractions, but prior to official NCAA sanctioning.	NCAA LSDBi
Dependent Variable		
Total Alumni Charitable Giving Per FTE	All giving from institutional alumni, restricted and unrestricted. Alumni include all former students of an institution who have earned credit toward a degree or certificate or have completed a degree; divided by FTE calculation to determine a per-student figure. Reported as dollars per FTE.	VSE Survey

Sample

Utilizing NCAA records from 2002 to 2013, FBS football and Division I men's basketball university affiliation lists were compiled by sport for each year included in the study (NCAA, 2002; 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010a; 2011; 2012; 2013a; NCAA, 2017b). Spreadsheets for the years included in the study parameters were then aggregated for each sport individually to determine university membership status for the two athletic programs on an annual basis. Separate analyses were conducted for Division I FBS football programs and Division I men's basketball respectively and as such, two samples emerged. With regard to the analysis of NCAA major infractions in big-time football programs, all institutions affiliated with the Division I FBS designation between 2002-2003 and 2012-2013 were considered as part of the sample, yielding 124 institutions and 1240 total possible observations. Sample size was affected by varied FBS membership status over the course of the decade of analysis, as seven institutions joined the FBS during the timeframe of the study, and thus did not allow for observation of giving patterns for years in which affiliation was not maintained. One institution gained FBS status beginning during 2004-2005, one during 2005-2006, one during 2007-2008, two during 2011-2012, and two during 2012-2013, which shifted the total number of FBS institutions from 117 during 2002-2003 to 124 during the 2012-2013 year and resulted in 29 unobservable cases. Chapter 4 provides final sample sizes post-analyses, which accounted for membership variations as well as reductions due to lack of institutional variable reporting.

The sample size for Division I men's basketball included all institutions affiliated with the NCAA designation between 2002-2003 and 2012-2013. Through compilation of NCAA championship records from 2002 to 2013, 347 total member institutions emerged (3470 total

possible observations) (NCAA, 2017b). Unlike FBS football institutions, university membership under the Division I men's basketball designation varied more consistently from year to year, resulting in both institutional attrition and institutional membership growth that shifted total affiliated institutions from 326 in 2002-2003 to 347 in 2012-2013. During the decade included in the study, 25 institutions attained Division I status for men's basketball programs, one moved to Division II and regained Division I status the following year, and four dropped from the Division I designation to lower tiers of play. These changes resulted in the loss of 143 observations. Analyses described in Chapter 4 provide final sample sizes, which included membership variations as well as reductions due to lack of institutional variable reporting.

Analytic Strategy

In analyzing fiscal panel data across a ten-year period, consideration of inflation becomes paramount in order to ensure parity in comparing dollar amounts. Through the utilization of Consumer Price Index (CPI) data obtained via the Bureau of Labor and Statistics, all monetary figures were converted to real dollars in 2012 using a STATA-run inflation scalar. Using the last year of the study as a base for comparing changes allowed for discussion of trends in the most recent market and offered the most relevant point for reviewing the fiscal impact of long-term institutional behavior.

Research Question 1 addressed the incidence of NCAA major infractions within Division I FBS football and Division I men's basketball programs, respectively. To determine the occurrence of said violations for each designation of athletic programs, Research Question 1 was answered using descriptive statistical analysis, namely counts over time, via STATA 15.

Collectively, the figures obtained through descriptive statistics using data obtained from the NCAA LSDBI contextualized NCAA infractions relative to each athletic program and provided an overview of the breadth of major infractions cases in big-time, revenue generating programs.

Research Questions 2 and 3 sought to determine the relationship between institutional self-sanctions in Division I FBS football and Division I men's basketball programs, respectively, and total alumni charitable giving at institutions investigated for NCAA major infractions. Utilizing panel data obtained via IPEDS, VSE, and NCAA records, this study employed two-way fixed-effects regression analyses via Stata 15. Because of the emphasis on the net effects of organizational behavior in the form of self-sanctions on charitable giving at a given institution, this study required an analysis technique that placed emphasis on within-unit rather than between-unit variance. As such, this analytic approach aligned with resource dependence as organizational behavior may change in order to stabilize diverse resource streams (Cantwell & Taylor, 2015). Researchers (Angrist & Pischke, 2009; Cantwell & Taylor, 2015; Zhang, 2010) have identified fixed effects analyses as a well-suited approach for identifying unit change over time particularly due to the analysis of within-variance and the ability to control for potential omitted variable bias. Allison (2009) noted that within-unit emphasis serves as a benefit for consideration of intra-organizational changes because accounting for institution-level effects establishes each unit as its own control that future changes in organizational behavior may be measured against. Thus, emphasis on internal changes over time, or within-effects, gained via fixed effects provided the most appropriate basis for analyzing the subject matter via the chosen theoretic lenses.

The two-way fixed effects regression is comprised of two components: time-invariant

individual effects and period individual effects (Hsaio, 2007). Researchers (Arellano, 2003; Baltagi, 2005; Castilla, 2007; Firebaugh, Warner, & Massoglia, 2013; Hsaio, 2007; Wooldridge, 2002; Zhang, 2010) have noted that in addition to observable, time-variant qualities, each organization within a data set also maintains unique sets of operational processes, qualities, and characteristics specific to that unit. These variables, which include, but are not limited to, institutional management, mission, prestige, geographic locale, and Carnegie classification represent components of an institution not readily measured, but that remain consistent across time for each individual institution or unit, and as such, are time-invariant (Allison, 2009; Hsaio, 2007; Zhang, 2010). Researchers (Arellano, 2010; Firebaugh et al., 2013; Hsaio, 2007; Zhang, 2010) have emphasized the difficulty in including or accounting for all possible predictor variables, which may affect outcome variables in a given study. For example, NCAA post-season play or championship status represents a predictor variable that may impact alumni charitable giving. However, post-season eligibility or the ability for a team to win a championship may be impacted by unobserved institutional characteristics, geographic locale and institutional prestige, from a recruitment standpoint. Big-time athletic program personnel must be able to recruit high caliber athletes to continue to remain competitive and qualify for post-season play, and recruitment (in)abilities may hinge upon geographic positioning of an institution as well as the reputation of an institution. If unaccounted for, these intangibles may introduce unobserved heterogeneity that may bias estimates for post-season play relative to the effects on alumni charitable giving.

Zhang (2010) noted that unobserved heterogeneity becomes part of the error term in traditional regression models, which may be evidenced, for example, in the relationship

between post-season play and potential correlation with geographic locale or prestige in affecting recruitment of high-profile talent. Thus, failure to control for these unobserved variables effectively correlates predictor variables with error terms. This correlation violates a primary assumption of traditional regression models in that the error terms no longer remain orthogonal, and omitted variable bias occurs (Arellano, 2003; Castilla, 2007; Firebaugh et al., 2013; Zhang, 2010). In order to address time-invariant individual effects, or within-effects, and thus reduce the potential for omitted variable bias, fixed effects analyses for Research Questions 2 and 3 relied on Stata 15 functions to center each unit and associated dependent variables around respective means. Zhang (2010) identified this approach as within-transformation, whereby subtracting within-means from observations of each predictor variable allows for the differences to be input into the regression and the resulting outputs indicate deviation based on variable mean net of unobserved, unit-specific, time-invariant effects from the regression equation (Allison, 2009; Firebaugh et al., 2013). While both dummy-variable and within-transformation methods of controlling for time-invariant individual effects yield the same result, mean centering, or within transformation, proves less arduous than creating dummy-variables for all cases and associated variables in a study. By demeaning predictor variables, resulting fixed effects coefficients were free of bias due to omitted variables, which allowed for consideration of the effect of institutional self-sanctions *ceteris paribus*, or all other factors held equal. As such, fixed effects models aid in controlling for time-invariant characteristics, qualities, or processes so that the effects of model inputs on output can be determined net of other factors that may potentially bias independent variables if not controlled for.

Fixed effects regression models also account for period individual invariant variables, or fixed time effects. Hsaio (2007) defined fixed time effects as variables that remain consistent for all units included in a study but change over time including interest rates, recession, and economic outlook. Researchers (Cantwell & Taylor, 2015; Hsaio, 2007) have indicated the benefit of including time effects with regard to modeling social change, as historical time effects may introduce bias in estimating fixed effects coefficients. For example, recession trends in the United States and economic booms may impact giving trends or financial considerations for the year(s) involved. Researchers (CAE, 2017a; Drezner; 2006) have reported a link between charitable giving in higher education and stock market performance the United States and suggested that large-scale tax reform, such as The Economic Growth and Tax Relief Reconciliation Act of 2001, result in changes to charitable giving based on income bracket and affect all higher education institutions equally. From an athletics perspective, Texas A&M University - College Station is more likely than the University of Texas - El Paso, at baseline, to win, engage in NCAA violations, and receive donations based on athletic programs. However, both institutions are less likely to receive donations in the midst of recession or due to declines in stock market performances rather than during an economically prosperous time period because there is an overall decrease in money for donors to contribute. Another facet of historical time relevant for consideration relates to NCAA violations during a given year. During a given year, the incidence rate of NCAA violations and investigations may impact all institutions. If one institution is investigated for NCAA major infractions and chooses to self-sanction, other institutions faced with NCAA sanctions may choose to follow suit. Thus, the sheer volume of investigations within a given year and the subsequent organizational responses

was accounted for as they may trigger specific organizational behaviors for all units included in the study, which may not have otherwise occurred.

Within-unit fixed time effects also bear consideration with regard to data analyses. Decision making processes and organizational change within the field of higher education proves slow, as increasing stakeholder perspectives (Ikenberry, 1971; Shattock, 2003), complex decision making processes, more bureaucratic structures (Birnbaum, 1988; Ikenberry, 1971; Leslie & Rhoades, 1995), and competing individual demands (Pfeffer & Salancik, 1974) collectively delay prompt institution (re)action(s) (Birnbaum 1988; Ikenberry, 1971; Leslie & Rhoades, 1995; Pfeffer & Salancik, 1974; Shattock, 2003). As a result, institutional change for colleges and universities often occurs incrementally, and may require long-term planning in order to actualize action (Birnbaum, 1988; Selznick, 1957). This within-organization time function of change must be accounted for in order to effectively model self-sanctions as organizational change affecting institutional outcomes. Institutional responses to NCAA infractions do not occur immediately and similarly, the effects of sanctions on donors may also take time to appear.

Researchers (Hughes & Shank, 2008) argued that consideration of delayed effects with regard to big-time intercollegiate athletics may be crucial in fully conceptualizing the economic impact of sanctions and NCAA investigations on a given institution. While previous studies have focused on long-term effects of implemented sanctions, and have not specifically addressed self-sanctions, the long-term effects and financial recovery associated with major violations. To model organizational change within higher education relative to self-sanctioning processes, I ran separate analyses leading the dependent variable, which assisted in capturing the potential

delayed effects in alumni charitable giving. By creating a temporal gap, in which the dependent variable is led by a series of years, the model helped address changes in alumni charitable giving that may have occurred at later points in time beyond the year of institutional enactment of self-sanctions.

Institutional Review Board Procedures

The researcher filed a minimal review application (14-497) with the university's Institutional Review Board in November 2014 per departmental guidelines. Upon consideration of the scope of the study and the use of secondary data, which contained identifying data on institutions rather than human subjects, the IRB indicated an exemption from review. Despite the waiver, the researcher completed training via the National Institutes of Health Protecting Human Research Participants course in April 2014. Copies of the appropriate course completion certifications accompanied the submission of the original IRB minimal review application for the study.

CHAPTER 4

RESULTS

This chapter details the results of analyses for the three research questions included in this study, which address the incidence of NCAA major violations in Division I big-time athletic programs and the relationship between institutional self-sanctions and alumni charitable giving.

- RQ1: What is the incidence of reported NCAA major infractions in men's basketball and FBS football programs at Division I universities?
- RQ2: Net of other factors, what is the relationship between institutional self-sanctions in Division I FBS football programs and total alumni charitable giving at institutions investigated for NCAA major infractions?
- RQ3: Net of other factors, what is the relationship between institutional self-sanctions in Division I men's basketball programs and total alumni charitable giving at institutions investigated for NCAA major infractions?

Data sets for this study include publicly accessible information obtained for years 2002-2012 from the following databases: CASE VSE survey, IPEDS, and the NCAA LSDBi. The time parameters chosen for this study reflect consideration of changes to the structure of Division I FBS football with the implementation of the BCS system, as well as NCAA restructuring of the Division I men's basketball tournament, which broadened institutional accessibility to post-season play via the inclusion of play-in games. Data for the years presented adhere to fiscal year definitions as established by the VSE survey in order to ensure parity between financial records utilized and timing of infractions cases considered as part of the respective samples. All financial data reflect inflation adjustments made utilizing a scalar derived from the U.S. Bureau of Labor and Statistics' Consumer Price Index (CPI), and dollar amounts presented are adjusted to 2012 dollars. As a control for institutional size relative to the finance variables considered (endowment, alumni charitable giving, and total institutional revenue), all finance figures, post

inflation adjustments, were divided by the modified FTE calculation used in this study and the resulting values discussed for Research Questions 2 and 3 are discussed as dollars per FTE.

Description of Sample

Research Questions 2 and 3 address the impact of institutional self-sanctions on alumni charitable giving at Division I FBS football institutions and Division I men's basketball institutions, respectively. As such, this study is comprised of two samples. All Division I FBS institutions sponsor Division I men's basketball programs and are also included in the Division I men's basketball sample. However, not all universities in the Division I men's basketball sample sponsor Division I FBS football. The Division I FBS sample included all institutions that maintained affiliation with the designation within the time parameters of this study, which resulted in a total of 124 institutions and 1240 total possible observations. Shifts in Division I affiliation reduced the total number of possible observations to 1211. Missing data also affected the total number of observations, as institutions sometimes report VSE data as system aggregate figures rather than campus-level finance. As a result, the total sample size for the FBS football analysis became $n = 1,038$ and total number of institutions for the FBS football sample shifted to 109. STATA automatically excludes units with key missing data and in this study, institutions that did not report per-campus alumni charitable giving figures could not be considered within the fixed effects model. With regard to Division I men's basketball, the sample encompassed all institutions affiliated with the NCAA designation during the time frame of this study, resulting in 347 total members and 3,470 total observations. This sample size was also affected by variation in university membership under the Division I men's basketball

designation and the institutional attrition and membership growth decreased the number of total possible observations to 3,327. Missing data was more pronounced in the Division I men's basketball sample because of aggregate versus campus-level reporting in addition to the inclusion of a larger number of small schools that do not regularly contribute to the VSE. Missing data further reduced the sample size to $n = 2,706$ and the total number of institutions for the Division I men's basketball sample shifted to 291.

Descriptive Statistics

The purpose of this study is to address the relationship between institutional self-sanctions in Division I FBS football and Division I men's basketball programs, respectively, and as such, two datasets emerged. Differences in affiliation standards, financial scope, and athletic program structure (number of games in a season, recruiting practices, season length, post-season play, championship, etc.) between the two Division I affiliation designations necessitated separate consideration contingent upon sport to ensure parity in the conditions that institutions subscribe to, which are based on Division I sport type. The larger Division I FBS football sample consisted of 124 institutions, 106 public (85.48%) and 18 private (14.52%), across eleven athletic conferences, with four schools maintaining independent, non-conference affiliation. The initial Division I men's basketball sample included 347 institutions, 231 public (66.57%) and 116 private (33.43%), across 32 athletic conferences, with two schools maintaining independent, non-conference affiliation. Independent variables utilized as controls for institutional size with regard to understanding alumni charitable giving, aid in providing context for further discussion of regression outputs with regard to predicting changes in alumni

charitable giving over time. These variables are presented jointly in figures and tables, but statistics reported are designated by sample.

From 2002 to 2012, Division I FBS football institutions experienced overall growth in alumni charitable giving per FTE. Table 2 details average alumni charitable giving per FTE at the year and aggregate levels for both Division I FBS football and Division I men’s basketball institutions. For the first three years of the study, average alumni charitable giving per FTE at Division I men’s basketball universities surpassed averages at Division I FBS football institutions. However, these averages became nearly identical until the 2008 recession, which prompted declines in alumni charitable giving per FTE in both samples through 2009. By 2012, institutions showed signs of economic recovery post-recession and average alumni charitable giving per FTE increased to levels that exceeded previous averages throughout each year of the study. While average alumni charitable giving per FTE at Division I FBS football ($M = 1,167.85$, $SD = 1,884.02$) and Division I men’s basketball ($M = 1,166.88$, $SD = 2,348.02$) institutions provide a baseline for understanding the scope of alumni charitable giving at the average institution in each dataset, these figures should also be considered within the larger financial context of higher education.

Table 2

10-Year Trend in Average Alumni Charitable Giving per FTE for NCAA Division I institutions with Big-Time Athletic Programs, Designated by Athletic Program Type

Year	Division I FBS Football	Division I Men’s Basketball
2002	\$841.41	\$904.66
2003	\$856.31	\$1,000.13
2004	\$889.25	\$1,017.55
2005	\$1,252.38	\$1,252.18
2006	\$1,278.97	\$1,264.68

Year	Division I FBS Football	Division I Men's Basketball
2007	\$1,339.40	\$1,307.02
2008	\$1,232.11	\$1,196.47
2009	\$1,102.54	\$1,053.01
2010	\$1,202.72	\$1,266.58
2011	\$1,245.85	\$1,148.85
2012	\$1,548.07	\$1,385.00
Aggregate	\$1,167.85	\$1,166.88

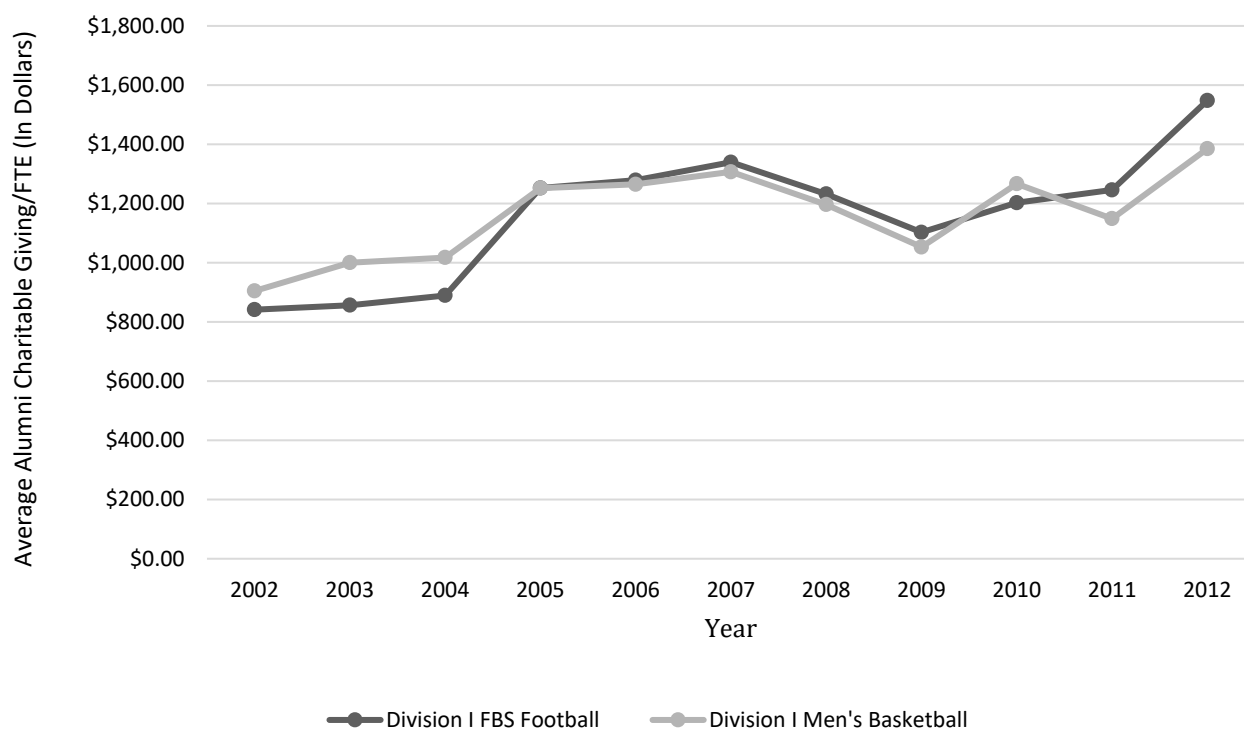


Figure 1. 10-year trend in average alumni charitable giving per FTE for NCAA Division I institutions with big-time athletic programs, designated by athletic program type.

Researchers (Hirko & Sweitzer, 2015; NCAA 2016c, 2016d; Taylor & Cantwell, 2019; Winston, 2004) have indicated increased stratification amongst higher education institutions, particularly from a financial resource perspective, and the chasm between the “haves” and the “have nots” continues to widen. This broader trend, present in intercollegiate athletics as well

as the larger field of higher education, becomes apparent when examining average alumni charitable giving per FTE based on percentile for both samples in this study. Figures 2 and 3 depict average alumni charitable contributions per FTE at Division I FBS football and Division I men’s basketball institutions, respectively, based on percentile. While these figures provide an overview of alumni giving across the timeframe of this study, they also illustrate the disparity in alumni giving per FTE amongst institutions that sponsor big-time athletic programs.

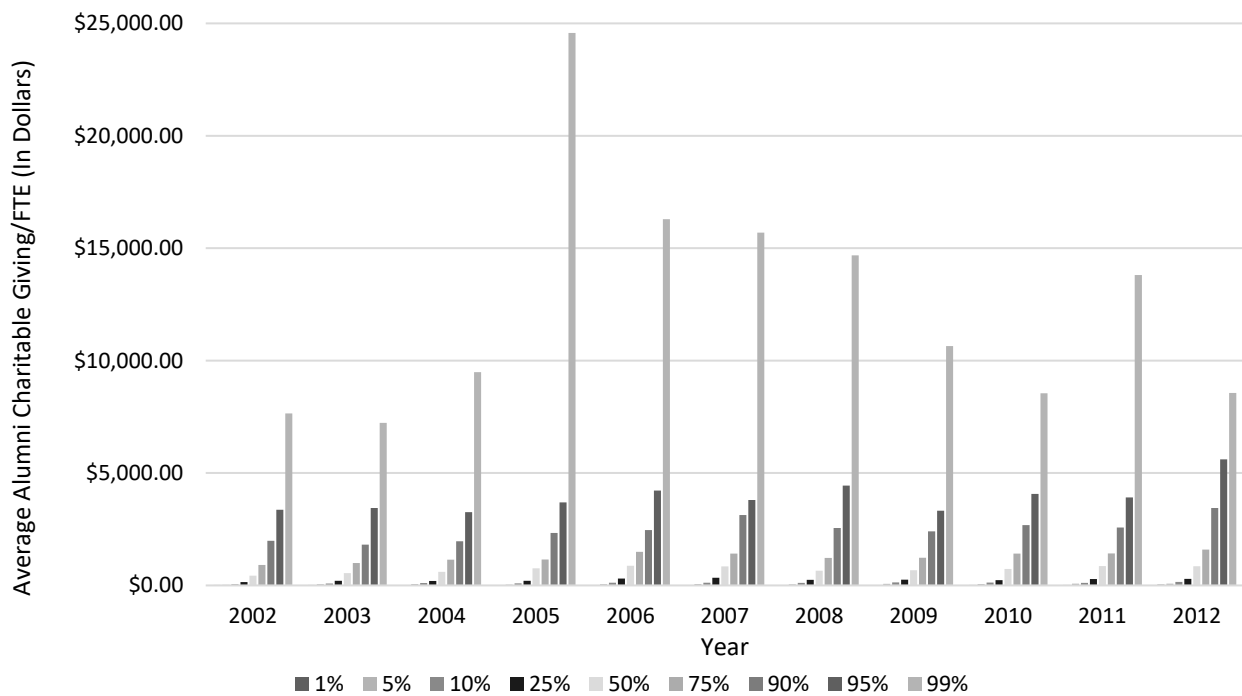


Figure 2. 10-year trend in average alumni charitable giving per FTE for NCAA Division I FBS football institutions, designated by percentile.

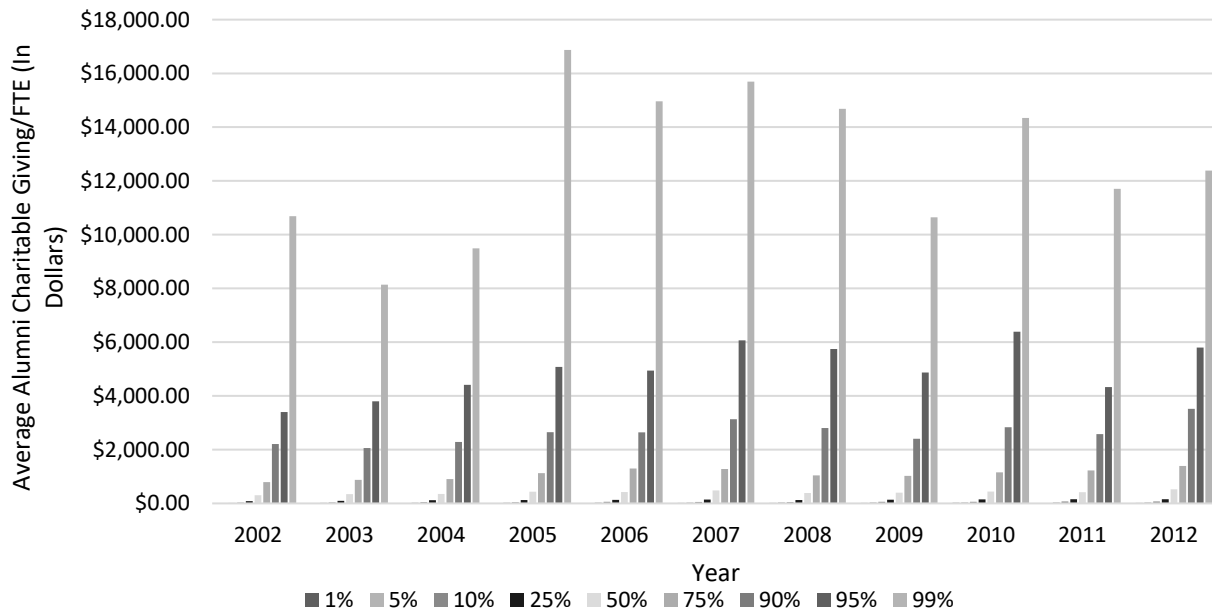


Figure 3. 10-year trend in average alumni charitable giving per FTE for NCAA Division I men's basketball institutions, designated by percentile.

Between 2002 and 2012, the average institution within the Division I FBS football and Division I men's basketball samples, respectively, also experienced slow, steady growth with regard to enrollment, endowment per FTE, and total revenues per FTE. Table 3 details descriptive statistics for key variables within the study. With regard to enrollment during this study, average FTE enrollment within both samples increased at a steady, proportional rate. Table 4 provides a ten-year overview of average FTE for institutions within each sample. FBS football institutions have a higher average FTE ($M = 22,526.22$, $SD = 10,462.23$) than universities within Division I men's basketball ($M = 15,186.09$, $SD = 10,973.81$). The difference in average FTE between the two samples is best understood relative to institutional governance at all Division I universities. Roughly 85% of the universities within the FBS sample are public institutions, whereas the Division I men's basketball designation encompasses a larger number of small, private institutions, thus accounting for the lower average FTE enrollment trends at the year and aggregate levels.

Table 3

Descriptive Statistics for Key Variables in Research Questions 2 and 3

Variable	Division I FBS Football		Division I Men's Basketball	
	M	SD	M	SD
Alumni Charitable Giving/FTE	1,167.85	1,184.019	1,166.876	2,348.024
Endowment/FTE	5,7602.7	126,939.6	61,192.98	18,6577
Total Revenues/FTE	48,560.67	480,2378	37,692.75	45,365.10
FTE	22,526.22	10,462.23	14,340.6	10,732.35
FTE ²	6.17 e+08	5.59 e+08	3.21 e+08	7.57 e+08

Table 4

10-Year Trend in Average FTE for NCAA Division I institutions with Big-Time Athletic Programs, Designated by Athletic Program Type

Year	Division I FBS Football	Division I Men's Basketball
2002	21,016.91	13,375.60
2003	21,390.99	13,567.79
2004	21,344.84	13,675.66
2005	21,975.36	14,142.10
2006	22,045.68	13,943.38
2007	22,249.26	13,943.38
2008	22,523.63	14,102.19
2009	23,191.00	14,234.73
2010	23,645.84	14,654.86
2011	24,050.95	14,973.72
2012	24,117.59	15,704.32
Aggregate	22,526.22	14,340.60

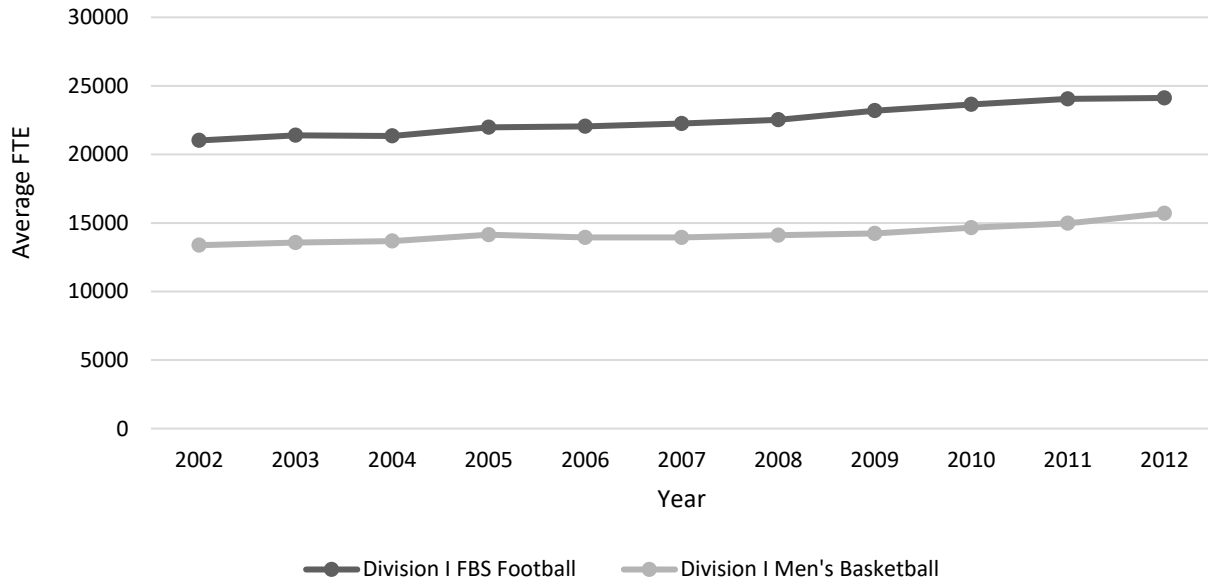


Figure 4. 10-year trend in average FTE for NCAA Division I institutions with big-time athletic programs, designated by athletic program type.

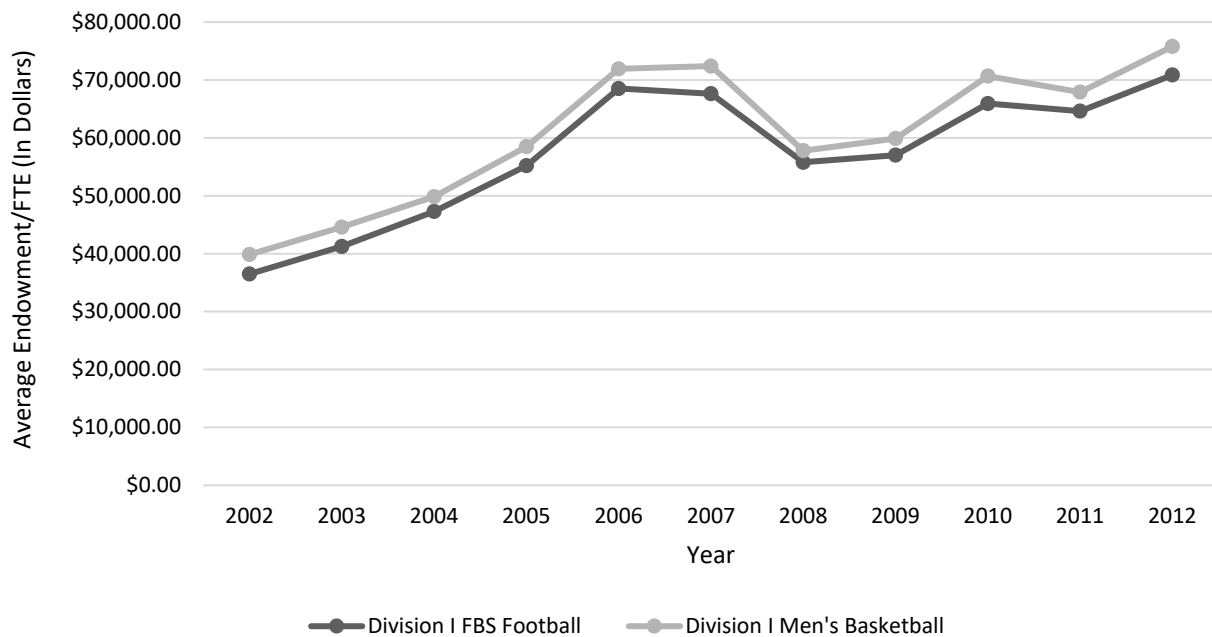


Figure 5. 10-year trend in average endowment per FTE for NCAA Division I institutions with big-time athletic programs, designated by athletic program type.

Table 5 lists ten-year trends in average endowment per FTE by Division I athletic program affiliation. Generally, institutions within both samples have seen an increase in

average endowment per FTE across the timeframe considered within this study. For the first six years of the study, average endowment per FTE gradually increased at Division I FBS football and Division I men’s basketball institutions until the 2008 recession, which resulted in a decrease in market value of endowments. Both samples show slow positive endowment growth in the years following the recession and by 2012, average endowment per FTE neared pre-recession peak values. Basic descriptive statistics for endowment per FTE within the football (M = \$57,602.70, SD = \$126,969.60) and basketball (M = \$61,192.98, SD = \$186,577.00) samples provide a basis for understanding the variable for the average institution, but averages across financial percentiles for each sample reveal disparities between Division I affiliated institutions. For example, football institutions within the 25th percentile for endowment per FTE report a mean of \$7,265.97 per FTE whereas institutions within in the 75th percentile for endowment per FTE report a mean of \$43,831.54 per FTE. This disparity is similar within basketball, as institutions within the 25th percentile for endowment per FTE report lower averages (\$4,526.24) in comparison to institutions within the 75th percentile (\$35,935.20). Figures 6 and 7 depict stratification with regard to average endowment per FTE by percentile for Division I FBS football and Division I men’s basketball, respectively.

Table 5

10-Year Trend in Average Endowment per FTE for NCAA Division I institutions with Big-Time Athletic Programs, Designated by Athletic Program Type

Year	Division I FBS Football	Division I Men’s Basketball
2002	\$36,491.94	\$39,854.75
2003	\$41,245.32	\$44,589.22
2004	\$47,286.03	\$49,839.17

Year	Division I FBS Football	Division I Men's Basketball
2005	\$55,186.72	\$58,479.66
2006	\$68,522.98	\$71,923.93
2007	\$67,630.48	\$72,388.78
2008	\$55,790.62	\$57,783.98
2009	\$57,016.39	\$59,893.25
2010	\$65,922.27	\$70,658.68
2011	\$64,615.86	\$67,903.95
2012	\$70,857.82	\$75,789.01
Aggregate	\$57,602.70	\$61,192.98

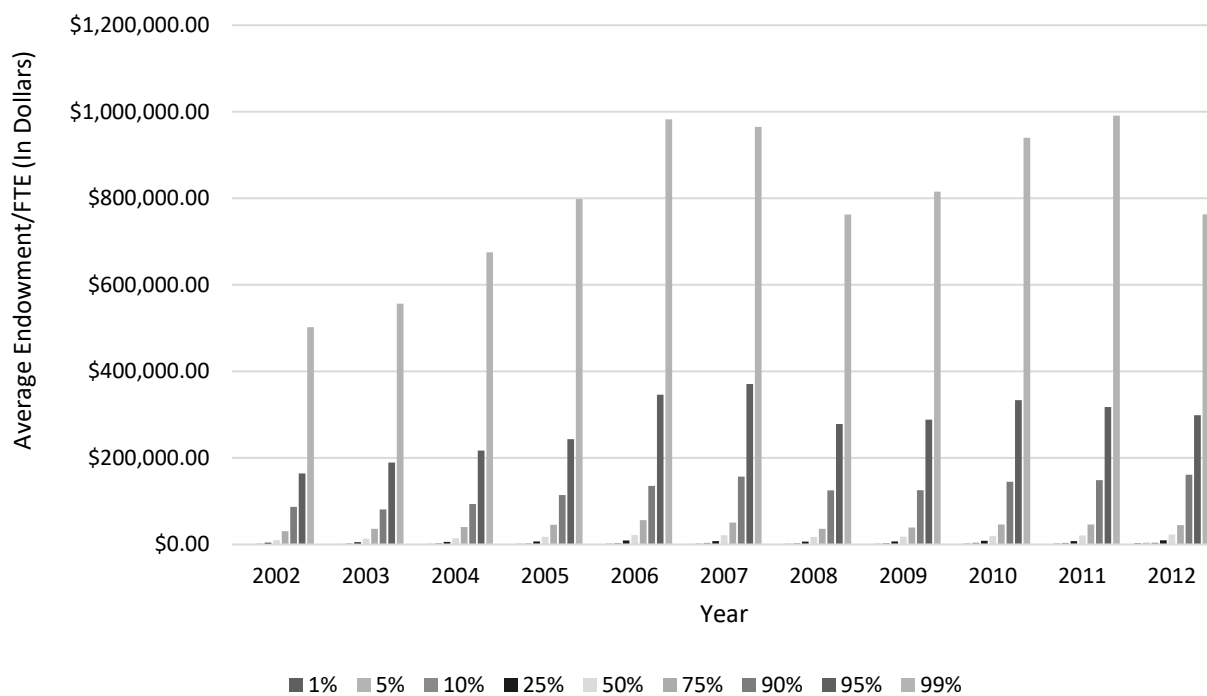


Figure 6. 10-year trend in average endowment per FTE for NCAA Division I FBS football institutions, designated by percentile.

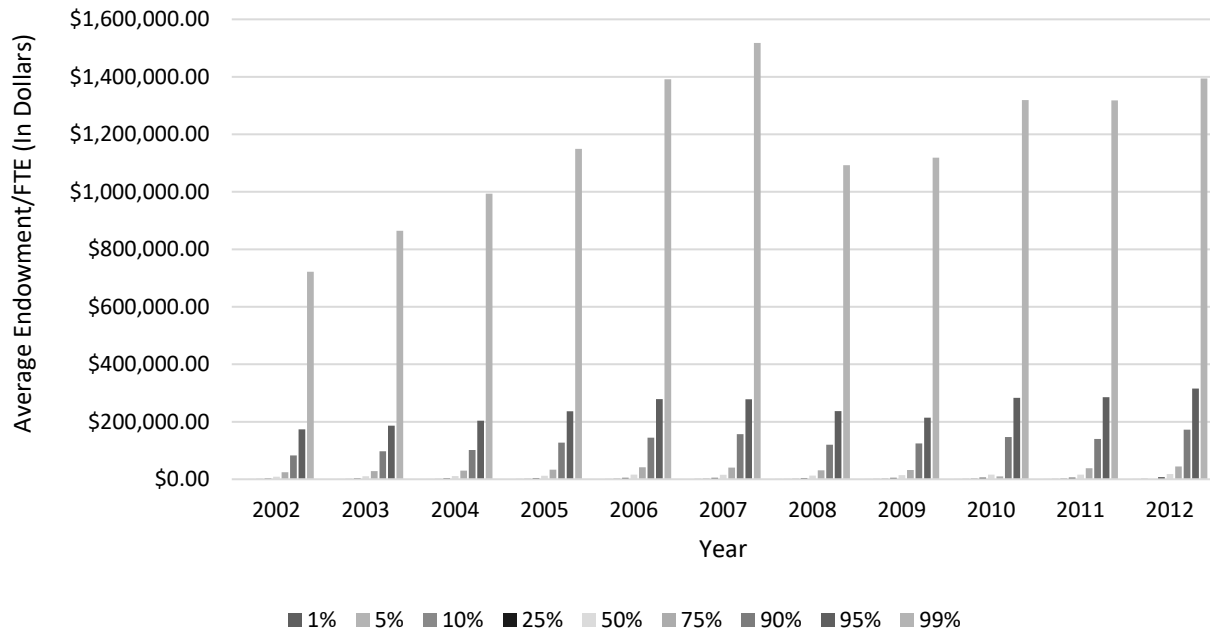


Figure 7. 10-year trend in average endowment per FTE for NCAA Division I men's basketball institutions, designated by percentile.

Total revenues per FTE for both study samples reflected trends evident within other variables, as average total revenues per FTE increased for Division I FBS football (M = \$48,560.67, SD = \$48,023.78) and Division I men's basketball (M = \$37,692.75, SD = \$45,365.10) institutions until the 2008 recession. Table 6 details average total revenues per FTE at the year and aggregate levels for both samples. By 2012, average total revenues per FTE for each sample reached an all-time high for the time period encompassed within this study. Similar to other financial variables considered in this study, the average total revenues per FTE also reflect the growing financial stratification between higher education institutions as institutions within (see Figures 9 and 10). Institutions within the top 50th percentiles reported average total revenues per FTE that not only outpaced those in the lower 50th percentiles, but they also saw higher levels of change per year.

Table 6

10-Year Trend in Average Total Revenues per FTE for NCAA Division I institutions with Big-Time Athletic Programs, Designated by Athletic Program Type

Year	Division I FBS Football	Division I Men's Basketball
2002	\$31,760.62	\$25,262.05
2003	\$38,126.00	\$30,669.73
2004	\$41,755.20	\$33,134.45
2005	\$43,222.11	\$35,926.23
2006	\$50,607.05	\$42,408.52
2007	\$48,935.59	\$37,075.27
2008	\$42,814.03	\$26,419.24
2009	\$54,495.32	\$41,775.04
2010	\$61,095.46	\$48,523.44
2011	\$55,807.55	\$41,766.30
2012	\$62,715.21	\$49,447.22
Aggregate	\$48,560.67	\$37,692.75

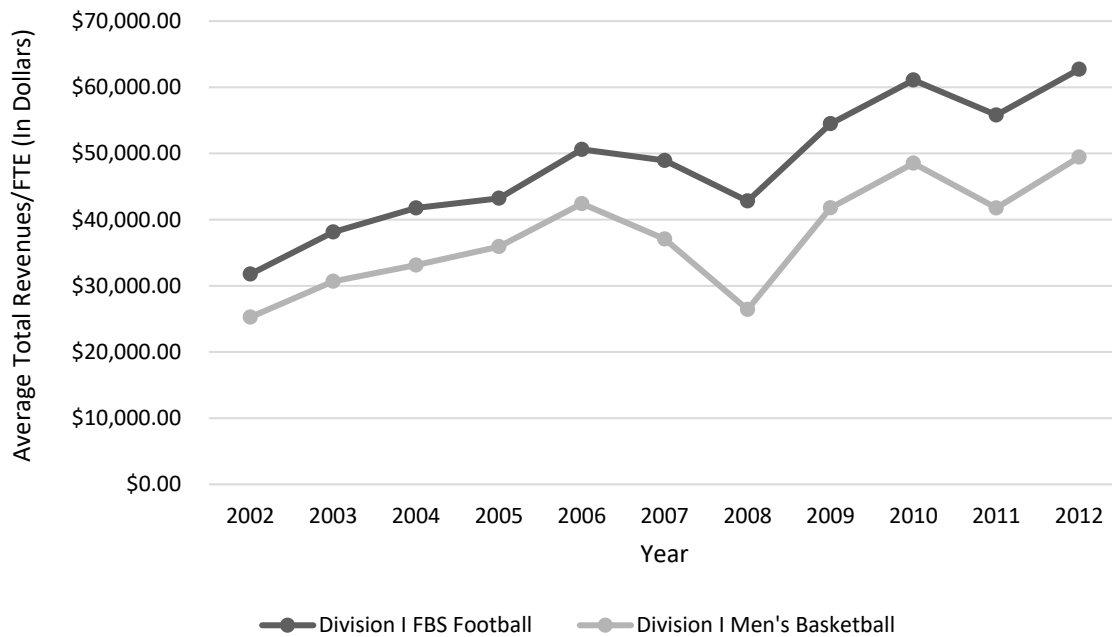


Figure 8. 10-year trend in average total revenues per FTE for NCAA Division I institutions with big-time athletic programs, designated by athletic program type.

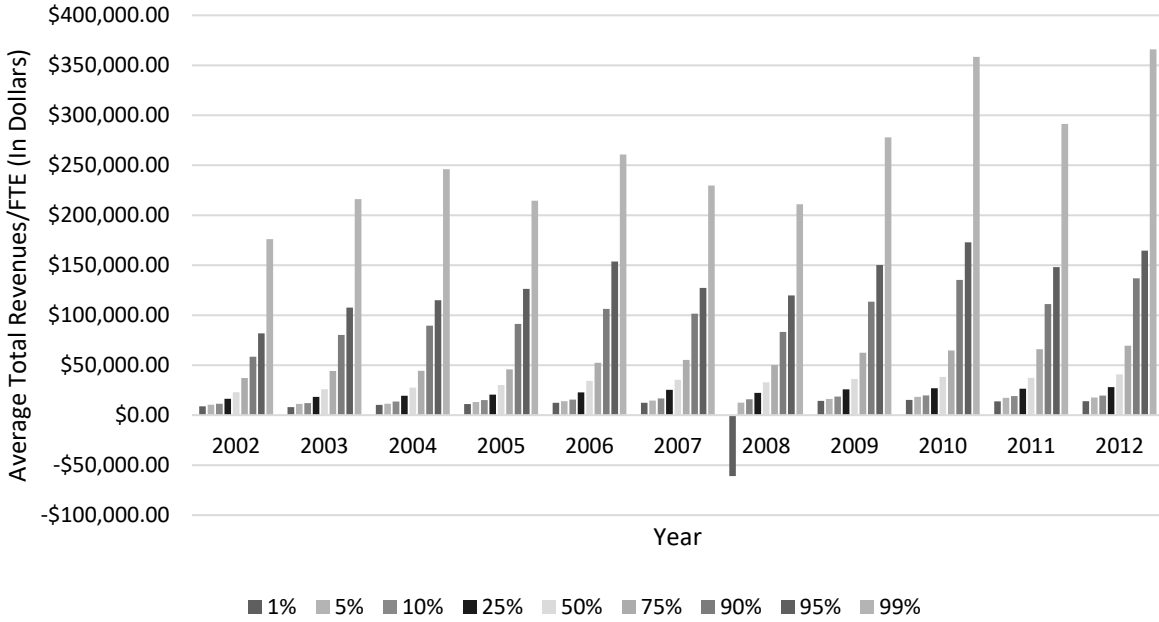


Figure 9. 10-year trend in average total revenues per FTE for NCAA Division I FBS football institutions, designated by percentile.

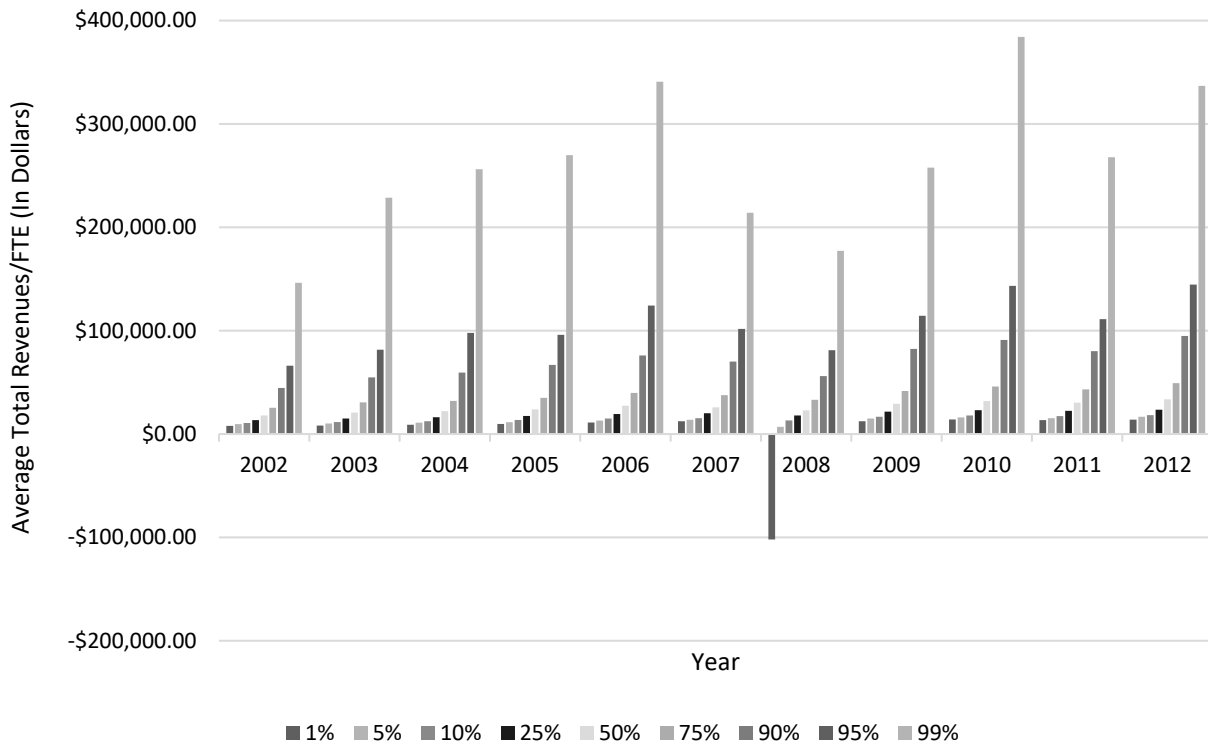


Figure 10. 10-year trend in average total revenues per FTE for NCAA Division I men's basketball institutions, designated by percentile.

Research Question 1

RQ1: What is the incidence of reported NCAA major infractions at Division I universities?

Between 2002 and 2012, the NCAA investigated and sanctioned 99 reported major infractions cases amongst Division I FBS football and Division I men's basketball programs, collectively, with a mean of nine major infractions cases ($SD = 2.86$) per year. These major infractions occurred across 70 unique Division I affiliated institutions which by 2012, comprised roughly one fifth (20.17%) of all Division I universities. Governance of the 70 institutions reporting major infractions differed from the larger sample of all 347 Division I universities. Public institutions accounted for 66.57% of all Division I institutions, whereas they comprised 82.86% of the 70 institutions reporting major infractions in a Division I big-time athletic program. Similarly, the percentage of private schools investigated for NCAA infractions was disproportionate across the two samples, as private schools accounted for 33.43% of the total Division I sample, but only 17.14% of the universities that reported major infractions in Division I FBS football and/or men's basketball programs.

A total of 22 universities (31.43%), 20 public and two private, reported multiple major violations during the ten-year time parameter of this study. Of these institutions, 15 (68.18%), reported two violations. The remaining seven universities (31.82%) reported three offenses. The 22 universities with multiple major infractions reported violations in various combinations based on athletic program type. Eighteen institutions (81.82%) indicated one or more violations in both football and basketball, three (13.64%) reported two or more football only violations, and one (4.56%) reported two or more basketball only violations. Across the timeframe of this

study, 14 of the 70 universities reported an incidence of major violations in football and basketball in the same year, one or more of which occurred in every year except 2003.

As Research Questions 2 and 3 addressed the impact of institutional self-sanctions on alumni charitable giving for each program type, respectively, the incidence of major infractions cases is also addressed for Division I FBS football and Division I men’s basketball programs, respectively. This provides a more complete representation of NCAA major infractions relative to institutional type as well as conference affiliation.

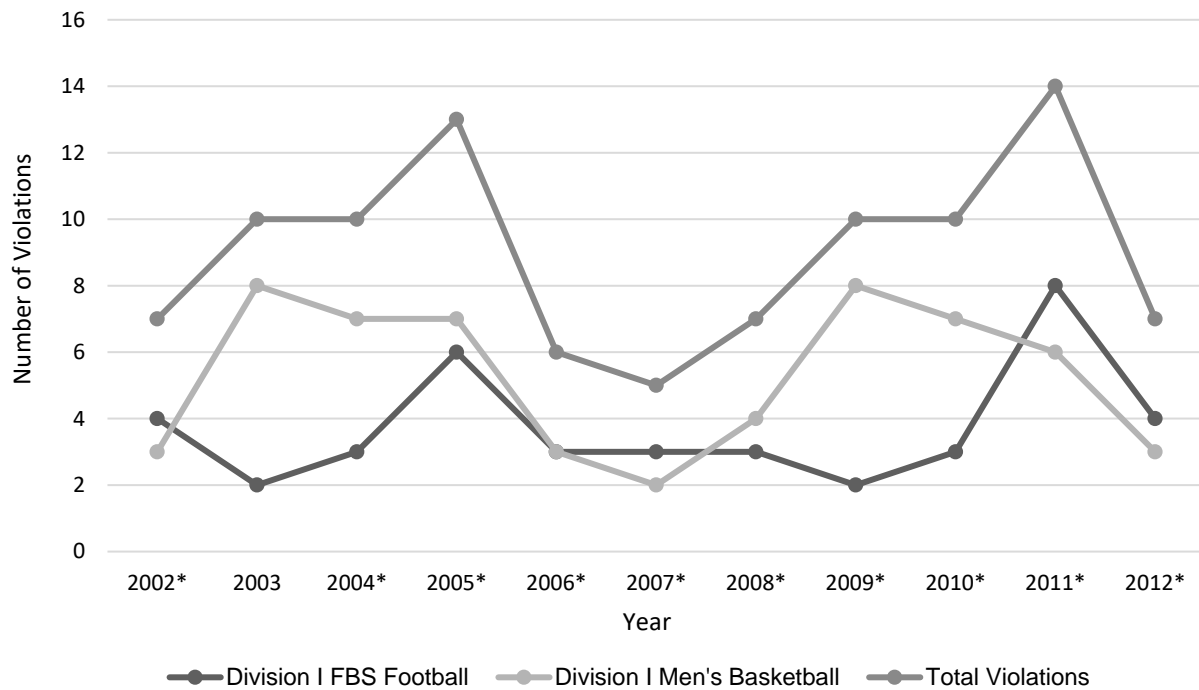
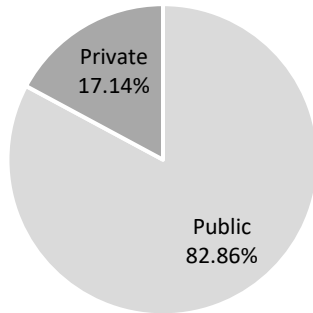


Figure 11. NCAA major infractions cases by year (2002-2012). *Denotes a year with one or more NCAA Division I institution reporting concurrent major infractions in Division I FBS football and Division I men’s basketball programs.

Governance of Aggregate Division I Universities Reporting NCAA Major Infractions from 2002 to 2012



Governance of Aggregate Division I Universities (2012)

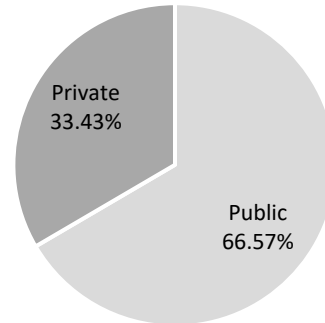


Figure 12. Comparison of governance of aggregate NCAA Division I universities reporting major infractions between 2002 and 2012 in relation to the governance of all NCAA Division I universities.

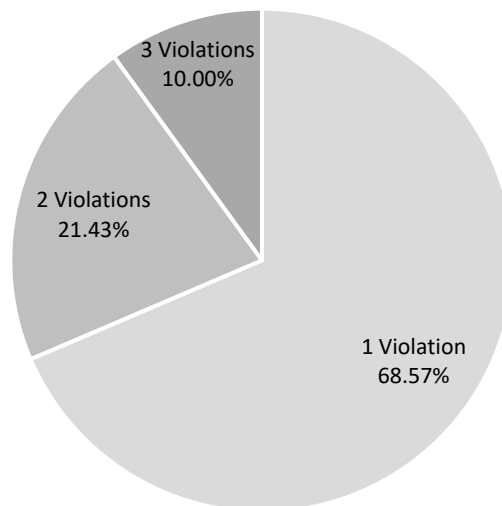


Figure 13. NCAA Division I universities investigated for NCAA major infractions in big-time athletic programs (Division I FBS football and Division I men's basketball programs combined) (N = 70) by infraction incidence rate (2002-2012).

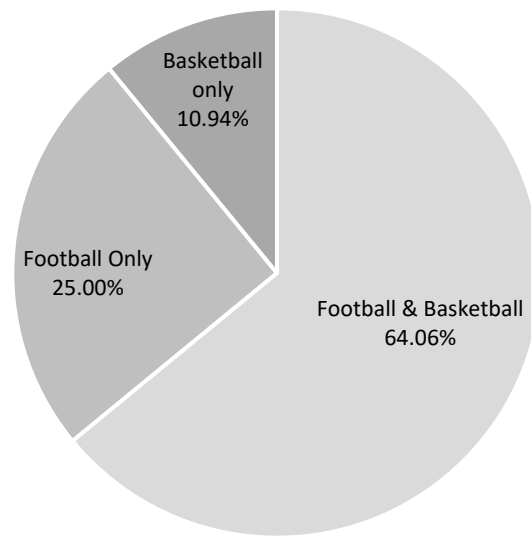


Figure 14. NCAA Division I universities investigated for NCAA major infractions (N = 22) based on incidence of violations by athletic program type (2002-2012).

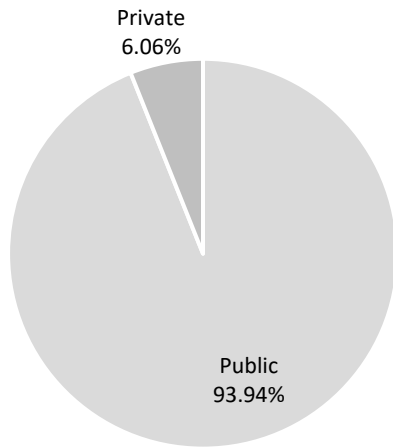
Division I FBS Football

Between 2002 and 2012, the NCAA investigated and sanctioned 41 reported cases of major violations within Division I FBS football programs across 33 individual institutions, with a mean of 3.73 cases (SD = 1.79) per year. By 2012, the Division I FBS football designation encompassed 124 unique institutions, and based on counts over time, 26.6% of these universities reported one or more NCAA major violations. Governance of universities reporting major infractions cases during the ten years included in this study proved disproportionate relative to governance in the larger sample, which consisted of all Division I FBS schools. Public schools represented 31 of the 33 institutions reporting violations (93.94%), whereas they comprise 85.48% of the larger sample. Similarly, the incidence of private schools reporting major infractions cases (6.06%) was disproportionate relative to the percentage of private schools in the larger sample (14.52%). Of the 41 NCAA reported cases, 39 (95.12%) occurred at

public institutions and two (4.88%) occurred at private universities, which again differs from the larger representation trends in the Division I FBS football sample. Eight of the 33 institutions (24.24%), all public, reported multiple infractions each with two violations that occurred at various points between 2002 and 2012. All infractions cases reported at Division I FBS football institutions were accompanied by self-sanctions at the respective universities.

Violations occurred within all eleven of the Division I FBS football conferences actively sponsoring football programs during the time frame of this study. Post 2012, the Big East and WAC adjusted affiliation based on conference realignment. Researchers (Knight Commission on Intercollegiate Athletics, 2009a; Satterfield, 2015) have indicated that conference affiliation provides an important context in understanding intercollegiate athletic finance, as institutional categorization by conference develops an organized peer group with regard to athletic competition, affects resources available, and influences spending trends. Furthermore, conference designations served as a determining factor for post-season play opportunities for Division I FBS football programs during the BCS era, as the “Power Five” conferences earned automatic bids to BCS bowl games. As a result, institutions within AQ conferences maintained an advantage with regard to securing post-season play opportunities in prominent bowls, and thus benefitted from an increased opportunity for earning associated post-season revenues. Twenty-eight (68.29%) of the 41 total major infractions cases occurred at institutions affiliated with AQ conferences and 13 (31.71%) were reported at non-AQ institutions. In addition, five of the eight institutions with repeat major offenses-maintained affiliation with AQ conferences.

Governance of NCAA Division I FBS Universities Reporting Major Infractions in Football from 2002 to 2012



Governance at NCAA Division I FBS Universities (2012)

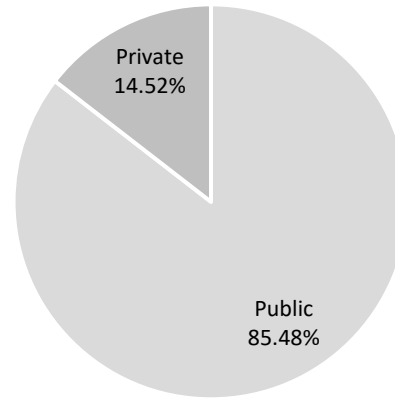


Figure 15. Comparison of governance of NCAA Division I FBS universities reporting major infractions in football between 2002 and 2012 in relation to the governance of all NCAA Division I FBS universities.

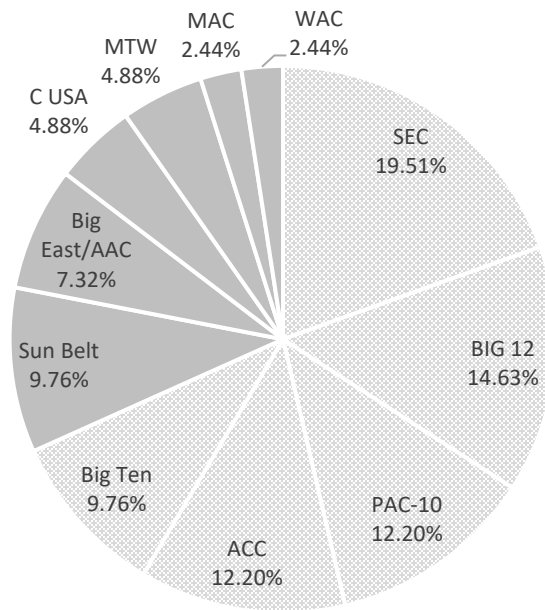


Figure 16. NCAA Division I FBS football major violations by athletic conference and BCS automatic qualifying (AQ) status.

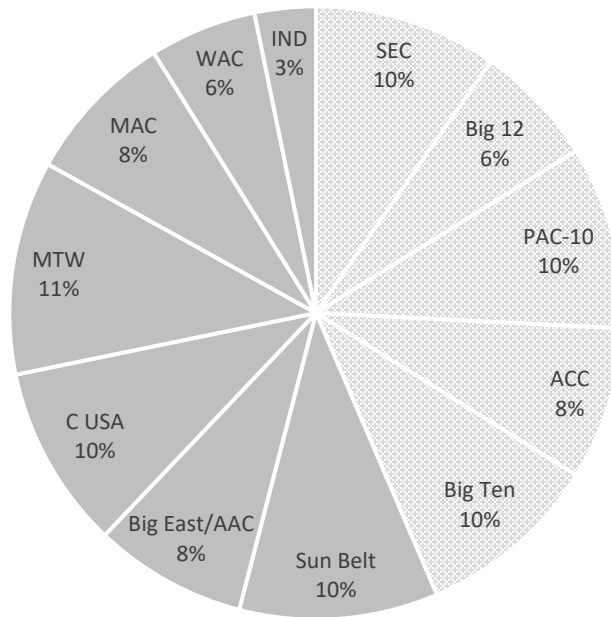


Figure 17. NCAA Division I FBS football programs by athletic conference and BCS automatic qualifying (AQ) status.

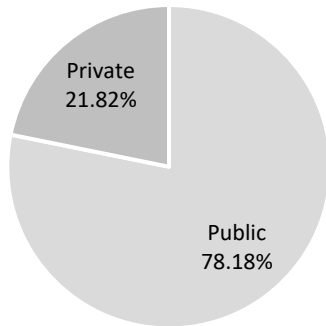
Division I Men's Basketball

From 2002 to 2012, the NCAA investigated and sanctioned 58 major violations cases within Division I Men's Basketball programs across 55 individual institutions, with a mean of 5.27 cases (SD = 2.28) per year. The sample of all Division I men's basketball programs included 347 institutions and during the time parameters of this study, 15.85% had been sanctioned for one or more NCAA major violation. With regard to governance, public institutions accounted for a larger proportion of major infractions cases (78.18%) than private universities (21.82%). These figures remain disproportionate relative to institutional governance within the larger Division I sample, as public and private universities comprise 66.57% and 33.43%, respectively. Of the 58 major violations, 45 (77.59%) occurred at public institutions and 13 (22.41%) occurred at private institutions, which similarly to football major infractions cases, indicates that violations occur at public institutions at a rate disproportionate to the larger sample of

universities. Repeat basketball only violations occurred less often than repeat football violations, as only three of the 55 institutions reporting major infractions (5.45%) reported more than one incident in basketball, which occurred at varying times throughout this study. With the exception of one, all NCAA major infractions cases were followed by institutional self-sanctions (98.28%).

Major infractions cases occurred across 25 (78.13%) of the 32 conferences that sponsor Division I men's basketball programs. Conferences within Division I men's basketball fall into a similar stratification pattern as the Division I FBS classifications, in that the "Power Seven" (ACC, Atlantic 10, Big 12, Big East, Big Ten, PAC-10, and SEC) represent institutions that have, historically, received the largest number of bids to the annual NCAA Division I Men's basketball tournament. Unlike power conferences during the BCS era, the "Power Seven" do not receive a set number of automatic advances to the tournament, but rather institutions affiliated with these conferences benefit from opportunities for additional media exposure and subsequent revenue associated with post-season play based on historic trends. Exactly half (50.00%) of major violations in Division I men's basketball programs occurred at institutions within the "Power Seven" conferences. Two of three (66.67%) Division I institutions that reported multiple infractions in Division I men's basketball maintained affiliation with a power seven conference.

Governance of NCAA Division I Universities Reporting Major Infractions in Basketball from 2002 to 2012



Governance of NCAA Division I Universities (2012)

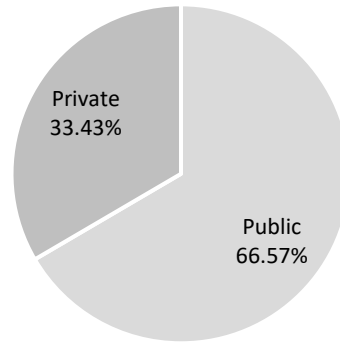


Figure 18. Comparison of governance of NCAA Division I universities reporting major infractions in basketball between 2002 and 2012 in relation to the governance of all Division I universities.

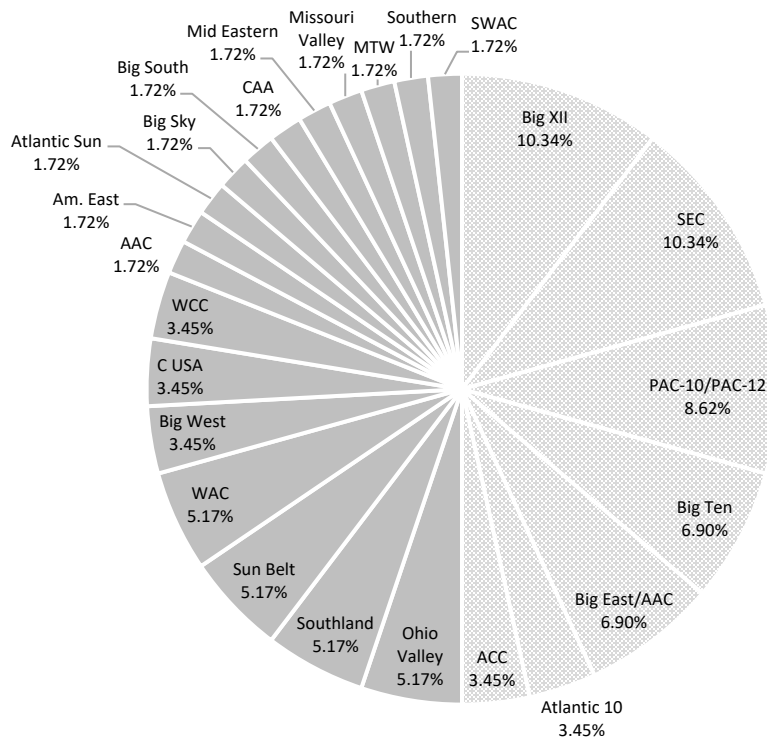


Figure 19. NCAA Division I men's basketball major violations by athletic conference and "Power Seven" conference affiliation.

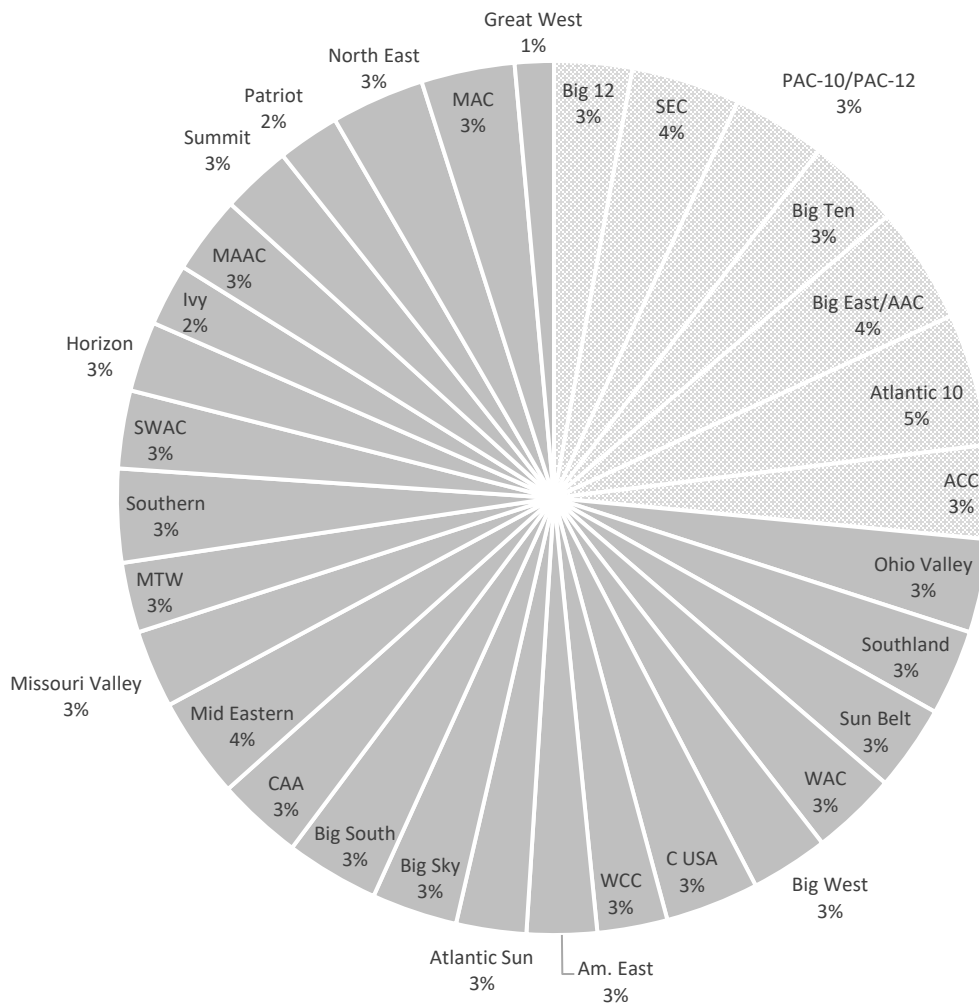


Figure 20. NCAA Division I men's basketball programs by athletic conference and "Power Seven" conference affiliation.

Research Question 2

RQ2: Net of other factors, what is the relationship between institutional self-sanctions in Division I FBS football programs and total alumni charitable giving at institutions investigated for NCAA major infractions?

Prior to fixed effects analyses, the dataset for Division I FBS football programs was tested for serial correlation, which occurs when standard error terms for a given variable are correlated throughout the course of multiple observations over time. Researchers (Angrist &

Pischke, 2009; Drukker, 2003; Pindyck & Rubinfeld, 1991; Wooldridge, 2002) have indicated that panel data oftentimes reflect serial or autocorrelation due to the time dimension of the data, as the error term for an individual unit observed in one year likely affects the error term for the same unit in subsequent years. Serial correlation can result in smaller estimations of standard errors than actual standard error values and may inflate interpretation of the significance of variables (Wooldridge, 2002). Utilizing the Wooldridge test for autocorrelation in panel data via the STATA command `xtserial`, which researchers (Drukker, 2003; Wooldridge, 2002) have recommended for analyzing serial correlation in panel data based on efficiency and facilitation of interpretation, output results verified serial correlation within the Division I FBS football programs dataset ($F = 1, 101, \text{Prob}>F = 0.0002$). The $F = 0.0002$ falls below the .05% threshold required to reject the null hypothesis, thus indicating serial correlation. In addition to the Wooldridge test, researchers (Angrist & Pischke, 2009) indicated the necessity of testing panel data for heteroskedasticity. Heteroskedasticity is the unequal variance of an independent variable in predicting a dependent variable at varying points on a regression line. Baum (2001) recommended the Modified Wald test for groupwise heteroskedasticity for its ease of implementation and interpretation in STATA through the use of the `xttest3` command. Results of this test indicated the presence of heteroskedasticity, in addition to serial correlation, in the Division I FBS football dataset $\chi^2(109) = 2.7e+06, \text{Prob}>\chi^2 = 0.0000$. Because of the possibility for type I error resulting from incorrect standard error estimates, standard errors for this regression are clustered one level up from the initial grouping by unit ID (institution identifier) using the STATA `cluster(state)` command. Angrist and Pischke (2009) noted that while this approach will not remove these issues from the analysis and results in no change in the actual

regression coefficients, clustering will provide more conservative error estimates and adjusted test statistics by which to infer significance.

Research Question 2 addressed, net of other factors, the relationship between institutional self-sanctions in Division I FBS football programs and alumni charitable giving. The results from a two-way fixed effects analysis indicated that institutional self-sanctions do not affect alumni charitable giving. Additional fixed effects analyses were conducted to determine if leading the dependent variable by a series of years in order to model self-sanctions as an organizational decision-making practice that reflects the slow manifestation of change in higher education would reveal lingering effects of self-sanctioning on alumni charitable giving. These analyses did not yield replicable, significant findings and as such are omitted from this study. One possible explanation for the lack of a significant relationship between self-sanctions and alumni charitable giving stems from the relatively few cases of self-sanctioning that occur annually. Given the infrequency of annual major infractions ($M = 3.73$, $SD = 1.79$) there may not be enough statistical power to fully determine the nature of this relationship.

Net of other factors, endowment per FTE proved significant in predicting changes in alumni charitable giving to an institution. On a micro level, regression results indicate that for every one dollar increase in endowment per FTE, a university will yield a \$0.01 increase in alumni charitable giving per FTE ($p < 0.01$). Thus, for every \$1,000 increase in endowment per FTE, Division I FBS football institutions see an increase of \$13.90 in alumni charitable giving per FTE. While this relationship appears small on a per dollar basis, when extrapolated within the larger context of endowment and FTE trends for the sample across the ten-year time frame of this study, shifts in endowment make a large-scale impact on alumni-charitable giving. The

average FTE for an FBS institution is 21,016.9, and a \$1,000 increase endowment per FTE at an institution with an average enrollment size results in an increase of \$292,135.05 in total alumni charitable giving at said university. Estimating the impact at \$1,000 accounts for less than 1% of the standard deviation for Division I FBS average endowment per FTE. Assuming a half standard deviation in endowment per FTE at the average institution (\$63,469.80), which is plausible within the context of this study given the trends in endowment change, the average university would see an increase of approximately \$882.23 in alumni charitable giving per FTE. When multiplied by the average FTE for a Division I FBS university, this increase in total alumni charitable giving for an institution is substantial at roughly \$18.54 million.

Table 7

Two-Way Fixed Effects Panel Analysis using Clustered Standard Errors for NCAA Division I FBS Football Institutions

Variables	Alumni Charitable Giving/FTE
Endowment/FTE	0.0139*** (0.00321)
Total Revenue/FTE	-0.00399 (0.00453)
FTE	-0.236 (0.162)
FTE ²	2.39e-06 (1.77e-06)
Post Season	-53.56 (73.40)
Championship	60.12 (222.1)

Variables	Alumni Charitable Giving/FTE
Self-Sanctions	175.3 (139.5)
Constant	4,114* (2,322)
Observations	1,038
Number of Universities	109

*** p<0.01, ** p<0.05, * p<0.1, Robust standard errors in parentheses

Research Question 3

Similar in approach to Research Question 2, tests for serial correlation and heteroskedasticity were conducted prior to regression analyses of the Division I men's basketball dataset. The Wooldridge test for autocorrelation in panel data did not indicate serial correlation in this dataset ($F = 1, 273$), $\text{Prob}>F = 0.2078$, meaning the error terms of individual units included within this data set are not correlated over time. The Modified Wald test, however, indicated heteroskedasticity within this dataset $\chi^2(291) = 2.3e+34$, $\text{Prob}>\chi^2 = 0.0000$. Unlike Research Question 2, which utilized clustering to compensate for the presence of serial correlation and heteroskedasticity, accounting for heteroskedasticity alone is best accomplished via the White-Huber approach to robust standard errors estimates using the STATA command `robust`. Robust standard errors generate larger error terms than that of the initial regression output, and as such aid in safeguarding against the incidence of type I errors, whereby significance in coefficients and rejection of the null hypothesis is assumed due to the calculation of standard errors lower than what actually occur (Huber, 1967; White, 1980).

Similar to findings in Research Question 2, two-way fixed effects analysis indicated, net of other factors, there was no statistically significant relationship between institutional self-sanctions and alumni charitable giving. Additional two-way fixed effects analyses were conducted to assess potential lingering effects of self-sanctions on alumni-charitable giving as a consequence of the slow implementation of change-based decision-making processes in higher education. Results failed to yield replicable, statistically significant results and as such are omitted from this study. While institutions with Division I men's basketball programs reported higher incidence of self-sanctions as an aggregate across the ten-year time frame of this study, the number of self-sanction cases may not be substantial enough to adequately address the practice relative to alumni charitable giving.

Net of other factors, endowment per FTE was the only variable to predict changes in alumni charitable giving over time. Regression results indicate that every one dollar increase in endowment per FTE yields an increase of \$0.008 in alumni charitable giving per FTE ($p < 0.01$). As with the Division I FBS football results, this ratio appears small at the per-dollar level, however, when considered within the context of \$1,000 increase in endowment per FTE, institutions within Division I men's basketball gain \$8.16 in alumni charitable giving per FTE. With an average enrollment of 15,186.09, a \$1,000 increase in endowment per FTE would yield an increase of \$123,918.49 in total alumni charitable giving for said institution. As with Division I FBS football, these figures become substantial when considered relative the standard deviation for endowment per FTE (\$186,577.00) at Division I men's basketball institutions. Assuming a half-standard deviation shift in endowment per FTE, the average Division I men's basketball university would see an increase of roughly \$761.23 in alumni charitable giving per

FTE. When considered alongside the average FTE for Division I men’s basketball institutions, this would result in roughly \$11.56 million in total alumni charitable giving.

Table 8

Two-Way Fixed Effects Panel Analysis using Robust Standard Errors for NCAA Division I Men’s Basketball Institutions

Variables	Alumni Charitable Giving/FTE
Endowment/FTE	0.00816*** (0.00213)
Total Revenue/FTE	0.000412 (0.00196)
FTE	-0.0464 (0.0452)
FTE ²	2.31e-07 (2.24e-07)
Post Season	-42.93 (42.27)
Championship	189.0 (199.1)
Self-Sanctions	-25.80 (48.54)
Constant	1,153** (559.5)
Observations	2,706
Number of Universities	291

*** p<0.01, ** p<0.05, * p<0.1, Robust standard errors in parentheses

CHAPTER 5

CONCLUSION

Over the past three decades, the financial stakes associated with NCAA Division I athletics, fueled by growing commercialism, have contributed to a pervasive “win culture” that equates financial gain with the sustainment of successful Division I FBS football and Division I men’s basketball programs. Surges in revenue stemming from television and digital media rights, conference payouts, ticket sales, and third-party sponsorships and donations have dramatically increased earning potential for big-time programs. Division I football and Division I men’s basketball programs have emerged as “revenue sports” for most institutions. However, affiliation with Division I big-time athletics is accompanied by pressures to maintain a competitive edge relative to peer institutions in order to optimize positioning for post-season play, conference and national championships, as well as personnel recruitment. Researchers (Duderstadt, 2000; Hirko & Sweitzer, 2015; Orszag & Israel, 2009) have chronicled the “arms race” within big-time athletic programs by which institutions strive to maintain state-of-the-art practice facilities and stadiums, recruit prominent coaching staff, and ultimately attract athletic prospects to bolster on-field/court successes.

The connection between athletic success and potential for revenue generation has not only fueled ever increasing spending rates for big-time programs, but it has also created a high-stakes arena that has incentivized NCAA rule violations. If undetected, rule infractions may offer an athletic program a competitive advantage otherwise unobtainable based on the structure and resources of the institution. However, if caught and reported to the NCAA, institutions face financial penalties that far exceed potential revenue gains from impropriety. Winfree and

McCluskey (2008) indicated that institutional self-sanctions have become commonplace for universities responding to NCAA athletic scandal crises. University decision makers strategically implement institutionally derived punishments in order to mitigate further penalty from the NCAA governing body, although the effectiveness of this practice remains debatable given that only 6% of self-sanctions cases prevent further NCAA sanctions (Winfrey & McCluskey, 2008). While institutional self-sanctions may assist with financial fallout associated with NCAA sanctions, little is known about how the use of self-sanctions as a crisis management tool affects institutional stakeholders.

The purpose of this study was to address the potential relationship between institutional use of self-sanctions following NCAA major violations and total alumni charitable giving to a university. Alumni represent a key resource for both institutions and their athletic programs. In 2016, alumni charitable giving accounted for roughly a quarter of all total charitable contributions to institutions, totaling \$9.93 billion (CAE, 2017a). Alumni charitable giving also accounts for a sizeable portion of university athletic revenues, serving as the largest source of revenue for top-tier programs and comprising the second largest revenue source for mid to lower-tier programs behind institutional subsidies (NCAA, 2016d). The shifting financial state of higher education has underscored the importance of alumni as a vital resource for institutions, but few researchers have addressed the potential negative ramifications of athletic scandal on alumni giving. With existing literature on athletics and alumni linking the two topics, specifically with regard to the indirect benefits of athletics, no research exists as to how institutional behavior in the wake of scandal affects alumni charitable contributions.

In order to better understand institutional self-sanctions as an organizational behavior, this study is situated within the theoretical concepts of resource dependence and neo-institutionalism. Resource dependence theory suggests that organizations operate within a field defined by competition for scarce resources (Pfeffer & Salancik, 1978). Because of this, a given organization seeks to develop and sustain multiple, diverse, external resource streams in order to ensure organizational survival (Pfeffer & Salancik, 1978). As such, institutional decision making is aimed to preserve these varied resources and introduce stability during times of crisis, which may jeopardize connections to external sources (Tolbert, 1985; Ulrich & Barney, 1984). Through this theoretical approach, institutional self-sanctions would function as a decision-making practice aimed to stabilize university relationships with alumni in order to preserve charitable giving as a revenue source. Neo-institutional theory provided a secondary framework in understanding the role of institutional self-sanctions relative to alumni charitable giving. Neo-institutionalism posits that universities are bound by a series of rules and conventionally accepted norms determined by the organizational field to which they belong (DiMaggio & Powell, 1983; Leslie, Slaughter, Taylor, & Zhang, 2012). Adherence to standards ensures institutional legitimacy relative to peer organizations, whereas deviation from norms may result in negative consequences with regard to prestige, legitimacy, and organizational sustainment (Tolbert, 1985). The emphasis on adherence to norms results in similar decision-making practices amongst member organizations (DiMaggio & Powell, 1983; Powell & DiMaggio, 1991). In this study, NCAA Division I affiliation constitutes an organizational field and universities that sponsor big-time athletic programs may utilize institutional self-sanctions to align behavior with norms established by peer institutions following scandal.

This study relied on the use of panel data between 2002 and 2012 derived from IPEDS, the CASE VSE survey, and the NCAA LSDBi. Research Question 1 relied on descriptive statistics to determine the incidence of NCAA major infractions within Division I FBS football programs and Division I men's basketball programs respectively. Research Questions 2 and 3 were addressed through the use of two-way fixed effects analyses, which controlled for both institutional time-invariant characteristics as well as time period effects, to estimate the relationship, net of other factors, between institutional self-sanctions and alumni charitable giving. Prior to analyses, both datasets were tested for serial correlation and heteroskedasticity, as these issues commonly occur in panel data (Wooldridge, 2002), and appropriate pre-testing adjustments were made to account for the presence of serial correlation and heteroskedasticity in the Division I FBS football dataset and heteroskedasticity in the Division I men's basketball dataset.

Discussion of Results

Research Question 1 addressed the incidence of NCAA major infractions within big-time athletic programs. From 2002 to 2012, the NCAA sanctioned 99 reports of major infractions within Division I FBS football and Division I men's basketball programs. By 2012, one fifth of all Division I institutions included within this study across both samples were investigated for major infractions. These violations primarily occurred at public institutions and multiple program violations at an institution were more likely to occur within Division I FBS football programs than Division I men's basketball programs. Interestingly, 14 of the 70 Division I universities reported major violations in football and men's basketball during the same year,

suggesting larger institutional-level issues with oversight for the associated years of the combined violations.

Research Questions 2 and 3 addressed the relationship, net of other factors, between institutional self-sanctions and alumni charitable giving at Division I FBS football and Division I men's basketball programs, respectively. The results from both analyses did not indicate a link between a university's use of institutional self-sanctions following NCAA major infractions and total alumni charitable giving to a university. However, endowment proved to be a significant predictor in changes in alumni charitable giving in both samples. For the Division I FBS football sample, a \$1.00 increase in endowment per FTE resulted in a \$0.01 increase in alumni charitable giving per FTE ($p < 0.01$). The same positive relationship between endowment and alumni charitable giving was present in the analysis for Division I men's basketball institutions, as a \$1.00 increase in endowment per FTE yielded \$0.008 in alumni charitable giving per FTE ($p < 0.01$).

As indicated in chapter 4, the relationships between endowment and alumni charitable giving seem small, but they are practically significant. The results of this study give way to the discussion of two larger concepts: understanding organizational behavior from a decision-making perspective and the effects of stratification amongst institutions affiliated with Division I big-time athletics. Neo-institutional and resource dependence theories provide two distinct explanations for the use of self-sanctions a crisis management tool. These frameworks provide the basis for the discussion of organizational decision-making. Findings regarding stratification are contextualized within larger trends in higher education in addition to literature regarding

the fraught state of intercollegiate athletic finance. Collectively, these concepts provide a foundation for future research and highlight implications for policy and practice.

Organizational Decision-Making

The combined findings of Research Question 1 regarding the incidence of scandal within big-time athletic programs and the analyses from Research Questions 2 and 3, which addressed the impact of self-sanctions on alumni charitable giving, provided insight as to how institutions behave following athletic scandals. Unsurprisingly, a large number of institutions within each sample reported NCAA major infractions during the time frame of this study. The prevalence of institutional self-sanctions following athletic scandal as noted in Research Question 1 confirms Winfree and McCluskey's (2008) discussion of the widespread implementation of self-sanctions since the first documented use in 1975. Research Questions 2 and 3 confirmed no significant relationship between self-sanctions and alumni charitable giving, which suggests that the practice does not serve a purpose in managing alumni charitable giving from a resource dependence perspective. Through this theoretical lens, universities would utilize institutional self-sanctions as a way to stabilize alumni charitable giving in order to maintain the revenue stream as part of the financial diversification necessary for organizational survival. However, results confirm self-sanctioning as a common practice amongst universities in violation of NCAA standards despite no impact on alumni charitable giving, which suggests that self-sanctions are instead a by-product of larger field-based norms.

Neo-institutionalism posits that institutional behavior is governed by a set of taken-for-granted norms codified by a professional organization or organizational field (DiMaggio &

Powell, 1988; Kraatz & Zajac, 1996; Leslie et al., 2012; Taylor & Cantwell, 2019; Tolbert, 1985). Thus, behavior hinges upon adherence to a shared culture rather than resource-based decision-making practices (Taylor & Cantwell, 2019). Preservation of institutional legitimacy becomes paramount via this theoretical lens, as organizations seek to maintain status relative to peer organizations. The uniform pressures, constraints, and norms within these fields typically result in isomorphism, whereby member organizations become more similar rather than dissimilar over time (DiMaggio & Powell, 1983; Leslie et al., 2012; Meyer & Rowan, 1977). Isomorphism ultimately results in institutions engaging in like decision-making practices in order to adhere to field norms. Tolbert (1985) indicated that deviation from established norms may result in a loss of organizational prestige or competitive standing relative to peer institutions and because perceived legitimacy and status within the field is crucial for organizations, this poses potential problems for offending institutions.

Division I NCAA athletics constitutes a professional or organizational field in that member organizations within the FBS or men's basketball classifications are bound by similar constraints and opportunities. Institutions affiliated with each athletic program type must adhere to a set of standards in order to maintain membership and are afforded similar opportunities relative to revenue attainment. While the NCAA has outlined, at length, official rules and regulations to govern intercollegiate athletic programs, the taken-for-granted norm within the field is that institutions must maintain compliant athletic programs. Compliance ensures a university's legitimacy within the Division I classification and directly affects an institution's ability to compete with peer institutions for both status and resources from an athletic perspective. Deviation in the form of NCAA major violations introduces chaos into this

normative pattern of behavior and per neo-institutional theory, universities out of compliance with athletic regulations engage in decision-making practices designed to re-establish legitimacy.

During times of crisis, field-based norms provide a script of sorts for how institutions should behave in order to return to the status quo. The isomorphic tendencies of a field as outlined via neo-institutionalism suggest that the rise of self-sanctions in the wake of NCAA major infractions emerged as a collective practice based on the overarching emphasis on compliance within big-time athletic programs. This study provided support for Winfree and McCluskey's (2008) assertion that institutional self-sanctions have become a normative response for Division I universities following athletic scandal. Of the 99 major infractions cases investigated during the time frame of this study 98 (98.99%) were accompanied by self-sanctions imposed by the respective institution. This suggests that the prevailing notion of compliance amongst Division I athletic programs prompts affiliated universities to make like decisions and the isomorphic nature of universities with big-time athletic programs has normalized self-sanctions as a way to re-establish legitimacy threatened by infractions cases.

Tolbert (1985) noted that while organizational decision making via neo-institutional theory may result in enactment of practices that preserve institutional legitimacy, institutions may continue to implement these decisions despite null or negative impact with regard to outcome. If institutions utilize self-sanction practices as part of a crisis management strategy aimed to control athletic scandal fallout because the practice has become normative in Division I big-time athletics and they look to confirm legitimacy within the Division I field, they are doing so despite the practice having no measurable bearing on alumni charitable giving. Thus,

institutions self-sanction despite not expecting any change in stakeholder crisis outcomes from a financial perspective. In the case of this study, neo-institutionalism supports the notion that institutions implement self-sanctions following NCAA scandal, despite the ineffectiveness of the practice in affecting alumni charitable giving. While Winfree and McClusky (2008) outlined the potential economic value of sanctions in mitigating NCAA penalties, they argued that the practice also functions as a crisis management technique designed to also manage stakeholder fallout post-scandal. This study serves as an empirical extension of that suggestion, and from a neo-institutional perspective, the use of institutional self-sanctions remains a normative practice despite its ineffectiveness with regard to affecting alumni charitable giving.

An alternative explanation for the lack of statistical relationship, positive or negative, between institutional self-sanctions and alumni charitable giving is that perhaps self-sanctions serve an economic purpose by neutralizing the effects of scandal. Thus, self-sanctions would not have an impact on alumni charitable giving, but rather the organizational behavior would serve to control for financial fallout from alumni, resulting in a null statistical effect. This explanation makes sense within the context of resource dependence theory, which emphasizes that institutions align decision-making practices with the need to maintain several diverse sources of revenue in order to ensure organizational viability. Because organizational fields are marked by scarce resources, institutions face uncertainty with regard to resource attainment and, as such, they strive to maintain relationships with multiple, diverse external entities (Aldrich & Pfeffer, 1976; Bastedo & Bowman, 2011; Ulrich & Barney, 1984). Decision making practices, therefore, are contingent upon the need to develop and sustain said relationships.

Institutions within the Division I classification, like other higher education institutions nation-wide, face increasing uncertainty with regard to resource streams. As such, colleges and universities have placed increasing emphasis on the development and sustainment of alternative resources (Archibald & Feldman, 2011; Cheslock & Gianneschi, 2008). Alumni charitable giving has emerged as an important source of revenue and given the role that athletic programs play in alumni relations, the incidence of athletic scandal introduces a degree of uncertainty into the relationship. Based on the findings of the present study, institutional self-sanctions may neutralize the ramifications of scandal relative to alumni, and thus the relationship between the university and alumni is stabilized despite the chaos of NCAA major infractions. Although there is no positive or negative gain in enacting institutional self-sanctions, the ability to sustain alumni as an external resource is an important function.

In sum, while there is no statistically significant relationship between institutional self-sanctions and alumni charitable giving, findings related to the prevalence of self-sanctions reveal how organizations behave in response to athletic crisis. Rather than protecting the bottom line with regard to alumni charitable giving as a revenue stream, self-sanctions more realistically function as a field-based norm designed to re-align an organization with the field-based expectation of athletic compliance, thus ensuring institutional legitimacy within Division I big-time athletics. Taylor and Cantwell (2019) indicated that higher education institutions are both revenue and status driven. Self-sanctions, despite a lack of economic function with regard to alumni charitable giving, are an example of institutional decision-making behaviors aimed to reify status within the larger organizational field. A secondary explanation, rooted in resource dependence theory, may suggest that institutional self-sanctions have an economic function

with regard to alumni charitable giving. While self-sanctions do not positively or negatively impact alumni charitable giving, the lack of change in alumni charitable giving may support the notion that institutional self-sanctions neutralize the financial impact of scandal, therefore stabilizing the relationship between alumni and a given institution.

Stratification

The results of this study also warrant consideration relative to the concept of stratification. Descriptive statistics for universities within the Division I FBS football and Division I men's basketball samples reveal a vast disparity between institutions in the upper and lower percentiles of financial variables, which included alumni charitable giving per FTE, endowment per FTE, and total revenues per FTE. These results are not surprising given the larger financial stratification trends present in higher education. Taylor and Cantwell (2019) indicated that inequity amongst colleges and universities is a byproduct of the inextricable relationship between finance and status. In early 21st century higher education, the vertical measure of inequity whereby greater wealth equates to higher prestige has become a standard for measuring institutional status (Taylor & Cantwell, 2019). Shifts in funding have altered the financial landscape of higher education, as resources have become scarcer and institutional competition for revenue is at an all-time high. Declines in state subsidies, particularly following the 2001 and 2008 recessions, and slow economic recovery created a climate of uncertainty regarding financing the rising costs per student within higher education. Cost-shifting practices led to a higher student share of degree costs, forced institutions to monitor administrative spending costs in addition to deferring maintenance, and necessitated heavier institutional

reliance on alternative streams of revenue (Desrochers, 2013; Desrochers & Wellman, 2011). Researchers (Desrochers, 2013; Desrochers & Wellman, 2011; Taylor & Cantwell, 2019; Winston, 2004) have indicated that the increased spending within higher education and the competition for scarce resources during a time where institutional costs continue to rise has amplified the gulf between the “haves” and “have nots.” Some private and elite public institutions have been able to increase spending on education while maintaining relatively stagnant enrollment numbers. Conversely, a vast majority of public institutions have seen increases in enrollment in tandem with rising costs per student and many private institutions functioned in a static state, as there was no increase in demand and therefore no increase in spending per student (Desrochers & Wellman, 2011; Winston, 2004). This has created a situation whereby elite institutions set a standard for spending that far outpaced non-peer institutions, thus resulting in ever-increasing stratification within higher education.

Results from Research Questions 2 and 3 further illuminate descriptive statistics. The relationship between endowment and alumni charitable giving largely suggests a problem of incumbency, whereby elite institutions will continue to sustain high levels of alumni charitable giving because of established endowment wealth. Institutions that sponsor Division I big-time athletic programs operating within the highest percentiles for endowment see larger increases in endowment values relative to mid-level universities and based on findings from this study, also yield larger returns with regard to alumni charitable giving. This creates a system by which institutions in the top 50% of endowment per FTE in Division I athletics will see increases in institutional revenues that outpace those at institutions in the bottom 50th percentile. When considered in the context of Division I institutions that sponsor big-time athletic programs, the

notion of increasing inequality sets the stage for understanding the impact of intercollegiate athletics on a top-tier versus average institution. The University of Michigan and the University of Virginia, two prominent universities that maintain Division I FBS membership, boast two of the 20 most profitable endowments within higher education (National Center for Education Statistics, 2018). As such, established endowments at these universities will continue to drive high levels of alumni giving, likely ensuring high expected levels of revenue. It is not surprising then, that institutions like the University of Michigan or the University of Virginia are able to sustain large, prominent big-time athletic programs given the larger institutional resources in play that foster the ability to generate and sustain support for said programs.

Bowen's (1980) revenue theory of costs suggests that revenues largely drive expenditures and as such, institutions that continue to sustain high-levels of revenue will also enable high levels of spending. Fort (2010) echoed this argument and indicated that the practice bleeds into intercollegiate athletic finance. This becomes problematic for the average institution, as high-producing universities such as the University of Michigan and the University of Virginia will continue to set standards for spending that far exceed the revenues earned at the average institutions. It is within this gap that stratification begins to take hold, as lower level institutions cannot compete within the same financial realm as institutions within the top financial percentiles (Hirko & Sweitzer, 2015).

Desrochers (2013) indicated that during a time where institutions struggle to effectively manage the rising costs of higher education, athletic costs increased at a rate nearly double that of academic spending across all institutions within all Division I subdivisions. The "arms race" in intercollegiate athletics has created a climate whereby athletic spending continues to

rise for all Division I institutions. However, revenue generation has not grown at rates that match or exceed expenditures for most non-elite programs. Division I universities with big-time athletic programs face pressures to keep pace with spending trends of not only peer institutions, but also standards set by larger, elite programs with regard to facilities, coaching staff, and recruitment (Hirko & Sweitzer, 2015). The financial elite within intercollegiate athletics are able to sustain high expenditure models due to high revenue generation, but for mid and lower-level programs, the model becomes high expenditure/low revenue. As a result, a widening gap also emerges within intercollegiate athletics where programs that operate within higher percentiles for revenue generation establish standards for competitiveness with regard to spending that results in increasing deficits for institutions on the opposite side of the financial spectrum. This has prompted universities to increase athletic subsidy at higher rates than ever before in order to maintain alignment with the high revenue/high expenditure model established by top earning schools (Hirko & Sweitzer, 2015; NCAA, 2016d; Oriard, 2009; Sperber, 1990; 2000; Thelin, 1996).

The increased spending allocated for big-time athletics as the average institution struggles to meet the financial costs associated with mission-critical services is questionable given the financial return on big-time athletics programs for the average university within Division I. The reality of intercollegiate athletics at most institutions is bleak. Only about 13 Division I athletic programs generate enough revenue to function as self-sustaining operations and the other 334 rely on university subsidy to varying degrees in order to compensate for revenue shortages in an era where athletic spending continues to rise (Denhart & Vedder, 2010; Oriard, 2009; USA Today, 2017b). With Division I athletic department deficits that reach

up to \$39.2 million, and a median net generated revenue of -\$12.87 million at Division I FBS institutions, university subsidies for big-time athletic programs are at an all-time high, particularly at institutions within mid-major and lower conferences (NCAA, 2016d). Even amongst elite big-time athletic programs, athletic departments rarely turn a profit as revenues gained from football and basketball programs as financial gains are engulfed by rising athletic costs. Given that big-time athletic programs are a losing proposition for most universities from a financial perspective, as expenses far outpace revenues and continue to rise due to pressures to maintain competitiveness at the conference and division levels, additional financial penalty from the NCAA following major violations only exacerbates athletic finance woes for the average institution. Furthermore, there is no real financial recourse post-scandal for the non-elite institutions. For the average university, the best outcome with regard to economic recovery following NCAA sanctions and associated penalties is to return to the financial norm for the institution pre-scandal. Because self-sanctions have no bearing on alumni charitable giving and only mitigate NCAA financial penalties in 6% of all cases (Winfrey & McCluskey, 2008), institutions do not engage in decision making practices post-scandal to offset potential lost revenue associated with scandal and in turn, these institutions bear a larger financial burden due to athletics.

When considering the larger financial constraints at the university level resulting from recessions and slow economic recovery and the increasing costs associated with big-time athletic programs, which on average cost an institution money to subsidize deficits in revenue, the question becomes at what point does the average institution price out of Division I big-time intercollegiate athletics? Furthermore, at what point do institutional decision makers critically

examine spending on big-time athletic programs relative to the benefits provided to the university as a whole? For the average institution, intercollegiate athletic programs yield no positive contributions to the university bottom line and the relevance of these auxiliary programs relative to the larger institutional mission remains widely contested. Furthermore, following incidence of NCAA major infractions, the average university, which already subsidizes a large portion of athletic departments, incurs additional financial penalty from NCAA sanctions and potential declines in other streams of revenue. Researchers (Clotfelter, 2011; Duderstadt, 2012; Hesel & Perko, 2010; Hirko & Sweitzer, 2015; Knight Commission on Intercollegiate Athletics, 2009b; 2010) have indicated that the rising costs of intercollegiate athletics are a major concern for institutional decision-makers at Division I institutions that sponsor big-time programs. Hesel and Perko (2010) found that while two-thirds of university presidents believed that current intercollegiate athletic spending trends were sustainable at their respective institutions, less than 25% believed that Division I FBS institutions as a whole could continue to keep pace with the escalating costs associated with big-time athletics. Presidents of institutions within mid and lower-tier institutions also expressed concern over the lack of equity amongst Division I FBS institutions in particular and the widening gap between the “haves” and “have nots” (Hesel & Perko, 2010; Knight Commission on Intercollegiate Athletics, 2009b) As costs to maintain competitive big-time athletic programs continue to rise and larger financial structures continue to reify the stratification between higher education institutions, those in the bottom financial percentiles may be forced to examine spending practices critically in order to ensure program viability. However, doing so may result in the loss of competitive status relative to peer institutions and those within more profitable conferences, as scaling back athletic

spending deviates from the high expenditure-driven climate of Division I intercollegiate athletics. As neo-institutionalism suggests, changes in behavior that do not align with field norms may result in a lack of perceived prestige with regard to athletics (Tolbert, 1985).

Implications for Policy and Practice

The findings from this study may aid in informing institutional decision-making practices in the wake of athletic scandal. A central theme across research on the relationship between intercollegiate athletics and alumni charitable giving hinges upon the notion that big-time athletic programs serve as the “front porch” of a university and this concept is widely touted by institutional decision makers as a normative truth (Duderstadt, 2012; Knight Commission on Intercollegiate Athletics, 2009b; Toma, 1998; 1999; Tucker 2004). While researchers have failed to definitively link big-time athletic program performance and the effect on alumni charitable giving, most studies highlight the indirect benefits of big-time athletics. Researchers (Anctil, 2009; Goff, 2000; Toma, 1998; 1999; Tucker, 2004) have indicated that big-time athletic programs, namely Division I FBS football and Division I men’s basketball, increase institutional visibility, bolster organizational branding, and establish connections with the larger university community. The increased commercialization of intercollegiate athletics has heightened institutional visibility via television exposure, social media presence, and game-day promotions, and big-time sports account for roughly half of all institutional media coverage (Weisbrod et al., 2008). This exposure has allowed external audiences to connect and interact with a university in a more accessible manner than the academic endeavors at a given university, and as such, athletics becomes an avenue for relationship building. This is especially true for institutional

alumni, who often utilize athletic programs as a way to stay connected or “check in” on their respective institutions post-graduation.

Because of this association, intercollegiate athletics oftentimes serves as a surrogate indicator for the status of the larger institution (Roy et al., 2004). Through this notion, individuals view the successes or failures of big-time athletic programs as indicative of the state of the university. Thus, the incidence of NCAA major infractions within a big-time athletic program may cause key stakeholder groups, particularly alumni, to develop a negative perception of a university as a whole. During a time where higher education institutions continue to rely more heavily on contributions from alumni to compensate for large-scale finance shifts at the state level, potential negative financial implications stemming from athletic scandal become important from a development perspective. Resource dependence theory suggests that institutional decision-making stems from a need to maintain diverse resources, and with a decline in state subsidy, alumni charitable giving has become a vital source of revenue for universities. University decision makers, relying on pervasive rhetoric linking athletic benefits to alumni relations, may implement institutional self-sanctions as a crisis management technique aimed to mitigate stakeholder fallout in the wake of athletic scandal. While this approach may make sense given research on the indirect benefits of big-time athletic programs relative to alumni populations and the pervasive rhetoric of athletics as a gateway to the university, the logic is flawed based on empirical evidence.

Self-sanctioning may appeal to alumni stakeholders from an affinity perspective, but this remains empirically untested and is beyond the scope of this study. As measured by donations, however, self-sanctions have no effect on alumni charitable giving. Zhang (2010) argued that

much of higher education policy is predicated upon field-based norms or observational data and, as a collective, institutional decision makers should instead focus on empirical data as the basis for establishing policy. Field specific, normative truths assist in identifying potential relationships or correlation between events. For example, the connection between intercollegiate athletics and institutional alumni provokes questions regarding how changes in athletic programs may affect alumni charitable giving. However, institutional decision makers should refrain from assuming that a correlation between the visibility of big-time athletics and the development of alumni relationships implies causation with regard to charitable giving.

Instead, reliance on data-driven large-scale observations over time provides quantifiable evidence of the effects of decision-making practices and can help better inform future policy and practice to ensure efficiency and effectiveness in achieving desired outcomes. Zhang (2010) argued that most of the central questions posed with regard to policy study focus on whether or not an approach yields an intended outcome. Reliance on empirically tested data, particularly panel data, allows for institutional decision makers to address outcomes related to a specific phenomenon and to control for potential confounding variables to determine relationships, net of other effects. In some cases, data to test policy-based questions are not always readily available or accessible. However, in cases such as the present study, which addresses the relationship between institutional self-sanctions and alumni charitable giving, all of the data are public and easily accessible. Institutions are best served using results derived from rigorous studies as the basis for policy making and practice whenever possible.

Implications for Research

While this study specifically addresses the relationship between institutional self-sanctions and total alumni charitable giving at an institution, the rise of intercollegiate athletic affiliated non-profit organizations (ANPOs) has altered the structure of alumni charitable giving to athletics and may affect larger institutional finance trends. Taylor, Barringer, and Warshaw (2018) defined ANPOs as organizations with a mission rooted in supporting a university. Within big-time intercollegiate athletics, ANPOs have become commonplace and are legitimized by the organizational field of Division I athletics, as almost all big-time athletic programs receive direct and indirect support from these organizations. These organizations serve as the primary fundraising vehicle for big-time intercollegiate athletic programs and while this may further charitable giving to an institution, ANPOs maintain independent legal status from their respective universities. As such, the finances of these institutions are separate from charitable giving to the larger university. Prominent examples including the University of Alabama's Crimson Tide Foundation and Texas A&M University's 12th Man Foundation raise substantial funds for their university counterparts and help subsidize costs of athletics. In 2017, The 12th Man Foundation reported \$75.1 million in transfers to the Texas A&M athletic department, a fraction of the \$272.1 million in total assets reported for the year (12th Man Foundation, 2018). Texas A&M University provides a breakdown of annual transfers that indicates fund use for facility subsidy, as fundraising efforts for the Kyle Field Campaign led by the 12th Man Foundation subsidized large portions of the renovations at the Kyle Field football stadium, but ANPOs may also utilize their financial position to aid in providing other forms of subsidy. For example, in an effort to further compensate Alabama football head coach Nick Saban's already

substantial salary, the Crimson Tide Foundation purchased his \$3.1 million-dollar home, in which the Saban still resides, as a “foundation asset” and the organization also maintains ownership of the coach’s cars (Scarborough, 2014).

Institutional self-sanctions may function differently when addressed relative to alumni charitable giving through an athletic ANPO, but specific inquiry into ANPO finance would be necessary to determine the relationship because of the separate finance structures as part of the 501(c)(3) legal status of athletic ANPOs. Athletic ANPOs, similar to university specific development or fundraising structures, maintain endowments, annual funds, and capital campaigns that, depending on institutional reporting structures, are considered as different financial entities. Because individual contributions to athletic ANPOs are designated specifically for athletics, it may be a reasonable assumption that alumni giving to an athletic ANPO versus the overall university may be more sensitive to NCAA major athletic violations than those contributing to other institutional funds. Depending on how institutions report endowment holdings and alumni charitable giving dollars, and whether or not athletic ANPO financials are considered alongside university embedded foundations, self-sanctions may yield effects within the ANPO that do not spill over into larger institutional reporting. For example, if institutional self-sanctions did positively affect alumni charitable giving, they may not be reflected in the total alumni charitable contribution trends at the larger university but would appear in alumni charitable giving to the ANPO directly.

Another issue that arises from the prominence of ANPOs within big-time intercollegiate athletics centers on institutional oversight. Institutional control of intercollegiate athletic programs is the direct responsibility of university presidents. At many institutions, athletic

department directors report directly to the president, which signals the importance of these programs to university decision makers. Big-time athletic programs present a unique challenge for university presidents as the heightened visibility of athletic programs provide a platform through which other institutional goals and initiatives may be advanced. However, presidents must carefully balance these opportunities relative to compliance standards necessary to ensure good standing with the NCAA and required in order to preserve a sense of institutional legitimacy relative to other Division I universities (Duderstadt, 2000). Thus, athletics may provide benefits from exposure related to media coverage and connections to the university community, but big-time programs also become a liability in the event of scandal, as fallout from financial and relational perspectives may affect the larger institution. ANPOs maintain their own board of directors and development staff, which oversee governance and day-to-day operations of the organization. University president involvement varies substantially depending on ANPO, but as a whole, institutional presidents relinquish athletic oversight to athletic ANPOs. This has serious implications with regard to compliance, as the NCAA frequently cites a lack of institutional control in sanctions. Given current fundraising structures with ANPOs, universities have created a situation where this may become commonplace. With oversight of finance falling within the responsibilities of a separate legal entity, presidents become one step further removed from institutional control of athletic programs, and without direct influence over finance, potential gray areas for athletic violations emerge. Further research into the relationship of athletic ANPOs and university presidents may provide a better overview of how the two parties function with regard to athletic oversight and may better inform both

institutional and professional organization practices with regard to maintaining institutional control.

A third implication for research centers upon the need to further address the effect of institutional self-sanctions on alumni, but from an affinity-based perspective. While the results of this study do not indicate a financial link between institutional self-sanctions and alumni charitable giving, further inquiry into how self-sanctions affect alumni from an affinity perspective may help in understanding the role of self-sanctioning as a crisis management tool. Assuming the notion of athletics as a surrogate indicator (Roy et al., 2004), scandals in big-time athletic programs affect a stakeholder's perception of the larger university. While this may not translate into changes in giving, the negative perceptions of an institutions' organizational behavior warrant consideration from a crisis management perspective. If institutional self-sanctions do not serve an economic function, nor do they address institutional image or status, the practice may fall entirely within the realm of conformity per neo-institutional theory.

Further consideration of institutional self-sanctions with regard to penalty severity may illuminate trends in alumni charitable giving not encompassed in this study. Following major NCAA violations, universities that sponsor big-time athletic programs self-impose a spectrum of penalties that range from reduction of recruiting visits to fines and bans on post-season play opportunities. Mild self-sanctions may affect alumni perceptions, and possibly associated charitable giving trends, differently than punishments that are more punitive in nature. Additional research that may classify self-sanctions by type (fines, recruiting, post-season play, scholarship limitations, etc.) may provide more detailed information regarding the scope and function of institutional self-sanctions in the wake of NCAA major athletic violations.

This study underscored trends of inequality in higher education that are also evident within big-time athletic programs. Competition for scarce resources during a time where costs of higher education continue to rise has created a divide amongst colleges and universities (Taylor & Cantwell, 2019). This trend also extends throughout big-time intercollegiate athletics, as wealthier programs continue to earn and spend at levels that far exceed that of the average university (Hirko & Sweitzer, 2015). As a result, wealthier programs maintain competitive advantages with regard to resource development. One manifestation of resource-based competitive advantages is the development and implementation of performance analytics within big-time athletic programs. Using wearable trackers, big-time programs are able to obtain bio-feedback and performance related data on student athletes during practices, scrimmages, and games, which allows program administrators to develop individually tailored training and game-day strategies to maximize player output (Rudner, 2018). This process requires substantial investment in not only the technology to capture analytics, but also personnel related costs to interpret and synthesize mass quantities of data. For wealthier institutions, investment in this form of technology is feasible given the larger financial systems in place at the university level, which help manage the rising costs of big-time athletic affiliation. However, given the financial disparities illustrated in this study, the advent of new technology relative to big-time athletics is another cost for average universities to assume on top of the struggles to manage rising institutional costs as well as growing athletic deficits. Performance analytics, therefore, may introduce another layer of stratification and unobtainable competitive advantage into the already complicated financial landscape of intercollegiate athletics and higher education finance. Further research regarding the issue and

potential links to stratification trends should be considered in order to address the role of technology in the widening gulf between athletic “haves” and “have nots.”

Another area for future research includes the rise of e-sports and the potential inclusion of competitive virtual gaming as part of intercollegiate athletics. NCAA athletic program membership hinges upon the principle of amateurism, whereby student athletes may not receive financial compensation for their participation in athletic endeavors (NCAA, 2019). Furthermore, student athletes are bound by NCAA regulations that prohibit competition that may include professional athletes in a given sport. Smith (2018) highlighted the rise of esports and the conflicting nature of virtual competition. For many gamers, participation in esports is accompanied by endorsements, sponsorships, and tournament-based financial earnings. This is in direct violation of NCAA standards for inclusion as a regulated athletic team and as such, esports remains unregulated at a national level. However, the growing popularity of this competitive field has led major universities that sponsor big-time athletic team to adopt esports programs (Smith, 2018). For many institutions, NCAA regulations regarding amateurism have prompted alternative approaches for esports university affiliation. Smith (2018) noted that institutions sponsoring esports programs situate gaming under athletic departments, thereby bypassing NCAA regulations for traditional athletic program oversight. While this area of competitive play has not yet fully integrated into the field of higher education, the direct conflict between NCAA bylaws and the nature of esports gives way to issues with regard to compliance, governance, and large-scale oversight. Future research is needed to determine both the scope of esports within higher education as it relates to university-sponsored athletic programs as well as compliance and violation management.

Limitations

A primary limitation of this study stems from the use of VSE survey data to track endowment and alumni charitable giving. Since its inception in 1957, the annual VSE survey has been the standard for the collection and reporting of voluntary support for higher education institutions throughout the United States. However, institutional participation has varied and by 2012, only 1,005 of roughly 5,000 invited colleges and universities responded to the study (CAE, 2015). CAE (2015) indicated that a core group of colleges and universities, which ranges from 875 to 980, provide voluntary support data and while this response rate appears small, figures reported for these organizations account for roughly 85% of all giving within higher education. Thus, the VSE remains the most apt source for alumni charitable giving data.

One issue within this study that affected the total institutions (*i*) and total observations (*n*) arose from the varied reporting practices amongst VSE respondents. While most institutions reported charitable giving based on their respective campus finance, other universities are housed within larger systems that reported aggregate system versus campus-level data. This creates issues when analyzing individual institutional data as dollar values reported at the flagship university within a system may differ, sometime substantially, from other affiliated system-based institutions. Because of the lack of parity in system versus campus-level reporting due to potential overstatement of per-campus voluntary support using aggregate figures, some universities were excluded from analyses. While altering reporting requirements may assist in ensuring per-campus financials rather than larger system reporting, this process can be cumbersome for large multi-campus systems and may result in lost data for said institutions that would otherwise consider reporting to the VSE.

With regard to endowment figures, this study relied on VSE reported data, which is largely subject to institutional participation rates. Use of data from the National Association of College and University Business Officers (NACUBO) provides an alternative approach to the collection of endowment figures for higher education institutions, as the organization publishes annual endowment reports and analyses. However, without direct comparison to VSE institutional responses, it is difficult to discern to what extent the alternative data source would affect n for this study. Furthermore, one benefit of the VSE relative to this study is that the financial figures obtained from the survey are bound by the same reporting timeline and definitions for fiscal years.

An additional limitation of this study stems from the small number of NCAA major infractions cases reported per year. The incidence of athletic scandal is portrayed as prevalent amongst Division I universities, and on an aggregate level, the sheer number of institutions that have reported and sanctioned major infractions cases (20.17%) in big-time athletic programs suggests a systemic issue with compliance. However, on a per-year basis, the incident rate is significantly smaller than that of the larger sample across the decade encompassed within this study. Division I FBS football institutions reported an average of 3.73 infractions cases (SD = 1.79) per year and Division I men's football universities reported only slightly higher rates with an average of 5.27 cases (SD = 2.28) per year. Considering the size of each of the samples on a per-year basis, the number of infractions cases relative to the number of affiliated institutions, 124 for FBS football and 347 for Division I men's basketball, is small. While no additional data regarding the incidence of infractions was available, as a finite number of cases occurred during the time frame of this study, the incidence of scandal in relation to the overall sample sizes may

minimize the statistical power of analyses in addressing the relationship between institutional self-sanctions and alumni charitable giving. This might be remedied if the time frame for data was expanded to encompass a greater number of years. However, this was outside the scope of the current study. Nonetheless, consideration of this portion of the study is crucial in addressing limitations in data and analyses.

Conclusion

This study addressed the relationship between institutional self-sanctions and alumni charitable giving at institutions affiliated with Division I big-time athletic programs. Big-time athletics serve as one of the most visible aspects of any college and university within the NCAA Division I classification and during incidences of scandal, universities garner negative publicity from both the major violations as well as NCAA sanctioning of offending programs. Institutions often opt to self-sanction immediately following athletic scandal to help control financial fallout associate with NCAA sanctions, but Winfree and McCluskey (2008) suggested that universities may also use self-sanctions as a vehicle for managing stakeholder fallout in the wake of scandal. University alumni represent a key stakeholder group for both athletic programs and institutions as a whole, as alumni charitable giving comprises a significant portion of athletic budgets across all Division I institutions and alumni giving at the university level is the second largest source of charitable donations behind foundations (CAE, 2017a, NCAA, 2016d). The relationship between alumni and intercollegiate athletics has been well documented, and although research remains inconclusive regarding the direct benefits of athletics on alumni giving, big-time athletic programs provide indirect benefits, which help to sustain relationships with university alumni

(Duderstadt, 2000; Fisher, 2009; Roy et al., 2004; Toma, 1998). Despite the well-documented relationship between intercollegiate athletics and alumni populations, there is a gap in literature with regard to athletic scandal and the associated effects on alumni charitable giving. Furthermore, no current research exists linking university use of institutional self-sanctions as a method for managing potential changes in alumni charitable giving as a result of scandal.

Results from this study indicated no relationship between institutional self-sanctions and alumni charitable giving. However, this finding provides interesting insight into how universities behave following athletic scandal. Rather than institutional self-sanctions functioning as a strategic approach to the sustainment of alumni charitable giving as a revenue stream, instead they function as a byproduct of institutional isomorphism associated with Division I athletic affiliation. While self-sanctions may be implemented to stave off further NCAA penalties, from a stakeholder relations perspective, universities engage in self-sanctioning practices as a means to maintain legitimacy relative to other Division I peers. Compliance violations deviate from norms adopted by all Division I member institutions and, in turn, self-sanctions serve as a standard practice for re-establishing a violating institution's status within the larger field. Results also illuminated the stratification within Division I athletics. Endowment largely predicts changes in alumni charitable giving and institutions with larger endowments will continue to attain resources at a higher level than institutions with average or small endowments. As such, the elite universities continue to maintain status from a financial perspective and have the means to continue to set standards for athletic spending and performance.

For the average university, Division I membership places pressures to adhere to normative high spending practices despite a lack of revenues to support this trend. Average institutions continue to fall further behind with regard to revenue, as increased athletic spending will necessitate larger subsidies to keep athletic departments afloat. This raises concerns regarding the sustainability of big-time athletic programs for institutions in mid and lower-level conferences, which do not benefit from the same large-scale revenue streams available within power conferences. Given the current spending models and the broader financial trends in higher education, whereby institutions rely on alternative sources of funding to compensate with declines in state subsidies and instability following recessions, the average university may reach a point where big-time athletics are no longer financially viable. For these institutions, allocation of institutional resources to sustain an auxiliary, non-mission supporting program draws additional criticism as institutions continue to struggle to relieve the financial cost-sharing burden for students (Duderstadt, 2003; Odenkirk, 1981; Sperber, 2000). However, discontinuation of big-time athletic programs is not an option for universities, as this change dramatically deviates from the normative practice of most peer institutions and would result in a loss of perceived legitimacy and status relative to other universities. The question then becomes to what extent do university presidents work to modify athletic spending practices in a way that lessens the financial burden for an institution, but also maintains a semblance of parity with regard to conference peers.

Universities, for as much as they seek to maximize revenue to fulfill institutional goals and missions, are also status seeking (Taylor & Cantwell, 2019). Even when practices are not financially lucrative for a university, decision makers may choose to sustain said behaviors in

order to maximize status. This may be the underlying case for intercollegiate athletics. For most institutions, big-time athletic programs cost universities money in the form of subsidy, not to mention any further penalties incurred from the NCAA following major violations. However, one could argue that the prominence of athletic programs, particularly those within Division I, aids universities in cultivating and projecting a form of status (Sweitzer, 2009). There may come a point where the price of status with regard to athletics becomes too heavy of a financial burden for universities within Division I athletics to bear, but changes to spending levels, or on a more extreme level athletic affiliation, may result in loss of institutional legitimacy, prestige, and status relative to peer institutions within Division I athletics. Because disaffiliation and capped spending rarely, if ever, occur, it is difficult to determine to what extent institutions would see an impact on a financial level. For now, institutions with big-time athletic programs will continue to spiral further into high level spending as a result of the growing “arms race.” Without major systemic overhaul of finance, the average institution will continue to subsidize growing athletic costs while bound by the higher-level financial systems of endowment and alumni charitable giving, which ultimately reify institutional positioning as a mid to lower-tier university with regard to Division I stratification.

In the broadest context, this study raises questions about how big-time intercollegiate athletics fit within the larger mission of a university. Weisbrod et al. (2008) defined most institutional missions as encompassing instruction, research, and public good. Mission-good objectives oftentimes fail to generate adequate revenue and, as such, institutions use revenue-good functions as a means to support them (Weisbrod et al., 2008). Because the notion of intercollegiate athletics as a mission-good endeavor within higher education remains contested

(Duderstadt, 2003; Odenkirk, 1981; Sperber, 2000), the expectation then becomes that they serve as a revenue-good auxiliary service to further university goals. The reality of big-time athletic finance, however, negates this assumption. For most universities, athletic programs do not generate enough revenues to self-sustain, and as a result, these programs instead rely on institutional subsidy to close the gap. From this perspective, athletic programs subtract from a university's bottom line rather than provide revenue to support other areas of an institution's mission. Buer (2009) argued that intercollegiate athletics occupies a relatively undefined space in higher education, as research does not definitely link big-time athletics to mission goals and athletics do not directly generate revenue for a university. This uneasy positioning is compounded by institutional prioritization of athletics and the intangible benefits that big-time programs bring to an institution. Through reliance on more empirically sound policy and practice, universities can take steps to better inform organizational decision-making practices, particularly with regard to intercollegiate athletic scandal management. This study is a small step forward in assisting with the latter and provides a research-based foundation for further investigation into intercollegiate athletic finance.

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