

A New Era: Financial Implications of Division I Intercollegiate Athletics on an Institution

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This research paper analyzed the financial differences between “Power Five” and “Group of Five” Division I Institutions. The results show Power Five universities have double the athletics budget (\$97.6 million vs. \$32.8 million), while receiving an average subsidy of \$4.6 million compared to \$18.4 million. Furthermore, our analysis shows that Power Five institutions are substantially more productive financially on the academic side in terms of research funding (\$428 million vs \$96 million) and have five times a median endowment size (\$1.25 billion vs \$229 million) compared to institutions residing in Group of Five conferences.

INTRODUCTION

On Thursday, August 7, 2014 the National Collegiate Athletics Association (NCAA) Division I Board of Directors adopted a new model giving legislative autonomy to the five “Power Five” conferences (NCAA, 2014). These Power Five conferences are the Atlantic Coast Conference (ACC), Big Ten Conference (BIG10), Big 12 Conference (Big 12), Pac-12 Conference (Pac-12), and the Southeastern Conference (SEC). They consist of 65 institutions (NCAA, 2016). Many administrators point to this decision as a landmark shift in Division I college athletics (Weaver, 2015). In essence, the new model allows for the autonomy conferences (Power Five) to propose and approve new legislation for their institutions without input from the other 282 Division I institutions. There are 128 Division I Football Bowl Subdivision universities (NCAA, 2016) while there are 347 total Division I member institutions. All 65 Power Five programs compete in Division I FBS football.

While there has always been a perceived divide between these five conferences and the other 63 FBS institutions (Weaver, 2015), this new autonomy legislation has created a wider gap by allowing programs to spend additional funds on their sports and student-athletes. The other institutions are allowed to adopt the same legislation once passed, provided they can afford it financially. Student-athletes at institutions that have adopted the new legislation have benefited from this new legislation, mainly in terms of additional scholarship support (cost of attendance), nutrition, and welfare. However, for some universities outside the Power Five (also known as Group of Five) it has forced them to make tough financial choices and spend additional resources to meet the legislation.

Spurring on this additional spending from the Power Five conferences has been the enhanced revenue streams from network television deals (Weaver, 2015). In the last decade conference distributions for

Power Five conferences have dramatically increased, including institutions in the Southeastern Conference (SEC) receiving over \$40 million annually (USA Today, 2017). Meanwhile, Group of Five institutions such as Conference USA receive \$1.5 million per year (Virginian Plot, 2016). Such a gap seems to be a problem if the NCAA strives to focus on equal opportunities for their student-athletes.

Although there are benefits and opportunities with the new NCAA structure and subsequent legislation related to improved student-athlete wellbeing, there are still some concerns that the new changes may have unintended consequences for institutions and student-athletes. While researchers have historically focused on financing for the overall NCAA to determine the financial effectiveness, there are very few research studies on the financial comparisons among different conferences.

PURPOSE OF THE STUDY

In regards to comparing and contrasting various conferences, the purpose of this research was to examine differences in Power Five and Group of Five athletic budgets in areas such as revenue, expenses, and subsidies. This study also specifically focused on the overall financial impact of the new NCAA legislation by examining differences in research and development (R&D) and endowments for Power Five and Group of Five institutions.

RESEARCH QUESTIONS

The research questions that guided this study were:

- 1) Which conference(s) has the largest and smallest budgets and subsidies?
- 2) What is the average budget and subsidy for Power Five and Group of Five institutions?
- 3) How do these institutions themselves differ in terms of research and development (R&D) and endowment size?
- 4) What is the financial impact of athletics on Power Five and Group of Five institutions?
(Discussion Question)

This manuscript focuses on responding to these research questions based on the national data and relevant literature. The subsequent section will address the literature on the NCAA both from historical and financial perspectives. After the literature section, this manuscript will address the methodology of the study. The results of the study and discussion will also be provided by comparing and contrasting the differences in Power Five and Group of Five institutions in terms of several factors (athletics' budgets, revenues, subsidies; universities' research and development, and endowment size) to determine what characteristics each of the member institutions exhibit and to examine trends. This manuscript will conclude with discussion and some implications for NCAA Division I institutions in terms of the new legislation.

RELEVANT LITERATURE

History of NCAA Membership

The shifting landscape of the NCAA is not a new phenomenon, over the years conferences, membership, and NCAA sports have shifted based on new legislation and adjustments. However, in recent years we have seen a dramatic uptick in movement between reclassifications of divisions (Division I, II, or III), conference affiliation, and sports individual institutions offer. It would seem with recent legislation of autonomy rules we will see another "market correction" soon in the aforementioned classifications.

One recent example of an institution struggling with that decision is the University of Alabama at Birmingham, which citing a lack of financial resources eliminated its football, rifle, and women's bowling programs within weeks of the autonomy decision, only to reinstate the programs months later (NY Times, 2015).

Studies conducted by College Sports Solutions found viable reasons for reinstating or cutting the programs. Several key factors were not considered when the initial decision was to eliminate football, rifle, and women's bowling. These included conference affiliation, out of state tuition from student-athletes in these sports, and perceived future costs that overestimated actual expenditures (Alabama Media Group, 2015).

Idaho became the first institution to drop from division I FBS to division I FCS in football (CBS Sports, 2016). The move transpired from the Sun Belt Conference's decision to drop Idaho and New Mexico State from the conference, leaving Idaho without a conference home in FBS. Instead, they have decided to drop to FCS and join the Big Sky Conference.

Recently a slew of universities have decided to reclassify their NCAA affiliation or drop sports. Savannah State has decided to drop from Division I to Division II (Savannah Morning News, 2017). The University of South Dakota has cut six athletic programs over the past several years (KFGO, 2017). At the University of Buffalo, the school announced it is cutting four programs: baseball, men's soccer, men's swimming & diving, and women's rowing (ESPN, 2017). Southern Illinois announced it will eliminate two sports (men's and women's tennis) to offset budget cuts and financial shortfalls (Southern Illinois University, 2017).

Other ramifications are still to come, as the extent of the new autonomy legislation remains unclear to many college athletics administrators. However, the recently enacted NCAA autonomy regulations are not the first time such rules have created a divide between those that have and want to spend more resources on athletics and those that want to support athletics but are unable to keep up financially with those at the higher level. This is not the first time autonomy legislation has been enacted. Although the NCAA was created in 1910, regulation through the NCAA did not begin until the creation of the Committee on Infractions in 1951 (Smith, 2000). That same year the NCAA appointed an Executive Director, Walter Byers, who was responsible for two main goals: enforcing rules and negotiating television contracts.

College athletics grew rapidly in the 1950s and 1960s, creating a lucrative revenue stream for the NCAA and its members. As the commercialization of college football increased, so too did the need for more regulations and a need to separate schools into classifications based on their athletic successes and competitive abilities (Smith, 1987). As some schools began to place a larger emphasis on college football and basketball, members decided it was necessary to separate into distinct categories. Prior to 1973, NCAA schools participated either in the University Division or the College Division sports (NCAA, 2017). In 1973, the NCAA membership voted to establish three divisions: Divisions I, II, and III. At the time, the 126 members playing "major" college football felt that some of the rules specific to recruiting and academics were hurting their programs (NY Times, 1973).

Dr. Alan Chapman, president of the NCAA, said, "Reorganization was vital to keep the association a valuable force in athletics."

Chapman, a professor of astrophysics at Rice, said: "I think it will enable these groups which are more homogeneous now to solve problems they face. It will tend to keep all of us together. The association could have kept drifting apart because of the great difference between the large and small schools. No longer will the big guys be telling the little guys what to do or vice versa."

"I don't think you will hear any more stories about the super conferences."

The NCAA president was referring to suggestions in recent years that the major football teams, which are regularly on television, leave the NCAA, form their own group and thus keep all television revenue for themselves (NY Times, 1973).

These institutions wanted to be able to protect their programs and not provide too many academic and financial restrictions on what had become a revenue generator. The NCAA allowed schools to choose whether they wanted to participate in Division I, II, or III, with one major exception: football. Only the 126 institutions classified as "major" were allowed to remain in that classification.

Each division was given the chance to vote on regulations that would impact only their division without the approval of the others (NCAA NEWS, 1973). The ability for institutions to object to unfavorable regulations played a significant role in at least slowing down the separation of schools.

However, autonomy was increasing, and the classifications began to force schools to determine how they wanted to invest in college athletics. Many schools already facing financial pressures decided that dropping out of Division I may be in their best interest.

The idea of a unified NCAA membership was short-lived. In 1976, the College Football Association (CFA) was formed on behalf of schools involved in major college football and “as a result of a frustration that had been born out of the inability to get a meaningful reorganization from the NCAA.” The primary focus of CFA was to negotiate TV contracts for the major football institutions. The College Football Association was later disbanded in 1997 after many institutions and conferences began to negotiate its own TV contracts (Sporting News, 1997).

In 1998 the Bowl Championship Series (BCS) was formed to select participants in the top five bowl games (Rose, Sugar, Orange, Fiesta, and BCS National Championship Game). The BCS lasted 16 seasons and was replaced in 2014 with the College Football Playoff (NY Times, 2014). The current College Football Playoff (CFP) selects the top four teams to play in a playoff style bracket (College Football Playoff, 2017). The CFP also selects participants in the other New Year’s Day Bowl Games (Rose, Sugar, Orange, Cotton, Fiesta, and Peach). College football revenues continue to balloon. In the initial year, the CFP brought in \$470 million, nearly double what the BCS brought in annually (ESPN, 2015).

NCAA Autonomy Legislation

The new autonomy legislation allows institutions to enact full-cost of attendance scholarships for student-athletes. Cost of attendance is a national figure developed by each institution’s financial aid office in accordance with the Department of Education (Department of Education, 2017).

If you're attending at least half-time, your COA is the estimate of

- tuition and fees
- the cost of *room and board* (or living expenses for students who do not contract with the school for room and board)
- the cost of books, supplies, transportation, loan fees, and miscellaneous expenses (including a reasonable amount for the documented cost of a personal computer)
- an allowance for child care or other dependent care
- costs related to a disability
- reasonable costs for eligible study-abroad programs

(Department of Education, 2017)

Since the adoption of a new model, hundreds of proposed NCAA autonomy legislation has been proposed (NCAA, 2016). The theme of the new legislation has centered on enhanced benefits to the student-athletes, such as “full cost of attendance.” This is an additional scholarship stipend in the form of a financial compensation up to the institution’s full cost of attendance as determined by the financial aid office and published in Department of Education (full list mentioned above). Cost of attendance includes personal costs (medical, toiletries, clothing, laundry) and transportation to and from school. Previous athletic aid only covered a full academic scholarship, room and board, and books. This additional aid covers what the institution deems the total out of pocket expenses to attend the university for one year (Department of Education, 2017). Autonomy legislation also allows for multi-year guaranteed scholarships, not being able to cut a student-athlete for performance related reasons (NCAA, 2016).

Other student-athlete friendly legislation has included additional nutrition and meals, medical access and treatment, and time demands. The legislation has also impacted recruiting, allowing institutions more permissive practices and pay for additional expenses, such as admissions costs and recruiting visits of the family. The new framework has also impacted coaches and support staff, allowing institutions to add additional coaches and medical personnel (NCAA, 2016). Changes in recruiting, including early signing period, and the addition of another assistant coach were the primary outcomes from the latest legislation (NCAA Legislation, 2017). This new legislation will continue to divide institutions in the “Power 5” and “Group of 5” conferences. There will be a select few schools in latter conferences that will adopt and continue to try to keep pace.

METHODOLOGY

For this study, the researchers analyzed secondary data from public national data sets: the NCAA Membership Financial Report (2005-2014) (USA Today, 2016), National Science Foundation (2016), and National Association of College and University Business Officers and Commonfund Institute endowment report (NACUBO & Commonfund Institute, 2017).

The former was developed by NCAA and it is based on “the revenue and expense report collected from more than 225 public schools in the NCAA’s Division I that have an obligation to release the data” (USA Today Methodology, 2016, para. 1). NCAA defines the total revenue category as all sources of operating revenue. This category includes ticket sales, contributions including amounts received directly from people, corporations, foundation, and other organizations, rights/licensing, student fees, school funds, and others including game guarantees, support from third-parties guaranteed by school such as TV income, housing allowance, revenue from sports campus, income from athletics restricted endowments, and investments that are used for operations in the reporting year (USA Today Methodology, 2016).

Total expenses are defined as all operating expenses. This category includes coaching/staff (all salaries, bonuses and benefits reported on the university’s tax forms for coaches and staff as well as amounts to coaches and staff from third parties that are guaranteed by the institution), scholarships (athletically related student aid, including summer school and tuition discounts and waivers, and aid for non-athletes such as student managers), facilities/overhead (direct facilities costs charged to the athletics program), and others that include guarantees paid to other schools, severance payments to past coaches and staff, recruiting, team travel, equipment and uniforms, game day and camp expenses, fundraising and marketing costs, spirit group support, medical expense/insurance and conference dues, the value of university-provided support such as administrative services, facilities and ground maintenance, security, risk management, utilities, depreciation and debt service that is not charged to the athletics department (USA Today Methodology, 2016).

Total subsidy was defined as the sum of student fees and direct and indirect institutional support and state money minus certain funds transferred back to the school. The transfer amount cannot exceed the sum of student fees and direct institutional support that the department receives from the school (USA Today Methodology, 2016). For the current study, the researchers used the base data and did not make any deviations.

The second data set was retrieved from the National Science Foundation (NSF). The data were collected via the Higher Education Research and Development (HERD) survey conducted by NSF (NSF, 2016). The survey was formerly known as the Survey of Research Development Expenditures at Universities and Colleges. The HERD survey is the primary source of information on research and development (R&D) expenditures at colleges and universities. It collects information on R&D expenditures by field of research and source of funds and also gathers information on types of research and expenses and headcounts of R&D personnel. The survey is an annual census of institutions that expended at least \$150,000 in separately budgeted R&D in the fiscal year (NSF HERD Survey, 2016). The most recent study conducted was for research and development in 2014. For the current study, the researchers downloaded the actual data set, did not make any deviations, and used that data for the analysis.

The last data set analyzed was the National Association of College and University Business Officers and Commonfund Institute endowment report (NACUBO & Commonfund Institute, 2017). The annual report analyzes return data and a broad range of related information gathered from U.S. colleges and universities, both public and private, as well as their supporting foundations. Collectively, the 805 schools that participated in the 2016 survey had \$515.1 billion in endowment assets. While the size of the average endowment was about \$639.9 million, nearly half of study participants had endowments that were \$100 million or less.

After compiling those three publicly available data sets from the original locations, the researchers imported them to Microsoft Office Excel to make sure that the data were imported appropriately. Unnecessary columns were removed such as non-Division I institutions (Division II and Division III

institutions). Then, the data set were imported to SPSS (24th edition) for data analysis. The researchers utilized descriptive statistics to calculate the means, stand deviations, and modes of the revenues, expenditures, and subsidies of the Power Five and Group of Five institutions. Then, the researchers examined rank and percentiles of research and development of the Power Five and Group of Five institutions. Finally, the researchers analyzed the overall university endowments to determine the medians of Power Five and Group of Five institutions' endowment size and compared the two. The subsequent section will address the results of the current study.

RESULTS

For research question 1, we found the conference with the largest average budget was the BIG10 Conference at \$106.6 million (M), closely followed by the SEC at \$105.6 million. In comparison the largest budget in the Group of Five was the American Conference at \$49.20 million. The smallest Power Five budget was the Pac 12 conference at \$82.8 million, while the Sunbelt conference had the smallest Group of Five budget at \$22.8 million.

In regards to subsidies, the largest average subsidy belongs to the American Conference at \$22.9 million; however, this also represented the smallest percentage of budget from subsidy for a Group of Five conference (45.1%). The largest percentage of the overall budget that comes from a university subsidy was the MAC, totaling 70% of its overall budget that is derived from subsidy.

The smallest average subsidy came from the SEC at \$1.3 million annually, which also claimed the smallest percentage of their budget at 1.2%. The smallest Group of Five conference subsidy came from the Sunbelt at \$14.8M. The largest subsidy from the Power Five came from the ACC at \$7.9 million (8.9% of budget); however, the Pac 12 had the largest percentage of budget from subsidy at 9.7% (\$7.2 million).

In regards to question 2, the average budget for a Group of Five institution was \$33.94 million. The average budget for a Power Five institution was \$96.26 million. This represents nearly twice the average budget of a Power Five institution versus a Group of Five institution. The average subsidy for a Group of Five institution was \$18.78 million, while the average subsidy for a Power Five institution was \$4.76 million. While Power Five institutions have nearly twice the average budget, it is Group of Five institutions that receive nearly four times the amount of subsidy comparatively (\$18.78M vs \$4.76M).

For research question 3 we utilized the National Science Foundation research & development expenditures database to analyze Group of Five vs Power Five institutions. We found Group of Five institutions have an average rank of 209, which was in the 33rd percentile for all institutions. The overall research and development average expenditures were \$95.52 million for Group of Five schools. Conversely, Power Five institutions had an average rank of 81, which was in the 13th percentile for all universities. The average research and development expenditures for Power Five institutions were \$428.06 million.

These results show that Power Five institutions are substantially more productive financially on the academic side in terms of research grants generated. Power Five universities generated more than four times the academic research dollars compared to Group of Five universities: \$428 million annually versus \$96 million annually.

Additionally, we analyzed the private endowments of all universities and compared Power Five and Group of Five institutions using NACUBO and Commonfund Institutes' 2016 survey. The median endowment for Power Five universities is \$1.25 billion versus \$229 million for Group of Five schools. A figure that is more than five times the amount, adding credence to the term "Power Five."

TABLE 1
NCAA FINANCES OF ATHLETICS FOR GROUP OF FIVE AND POWER FIVE
CONFERENCES (IN MILLIONS)

	2005 Budget	2014 Budget	Percent Change	2014 Subsidies	2014 Percent Subsidy
Group of Five Avg. (in millions)	\$16.80	\$32.80	95%	\$18.40	57%
Power Five Avg. (in millions)	\$45.20	\$97.60	116%	\$4.60	5%
Difference	\$28.40	\$64.80	128%	\$13.80	52%

TABLE 2
NCAA FINANCES OF CONFERENCES. (IN MILLIONS)

Group of Five Conferences

	2005 Budget	2014 Budget	Percent Change	2014 Subsidies	2014 Percent Subsidy
American	NA	\$49.20	NA	\$22.90	45%
Mountain West	\$18.60	\$38.70	108%	\$18.00	46%
Conference USA	\$19.00	\$29.60	56%	\$17.90	58%
Sunbelt	\$10.90	\$22.80	109%	\$14.80	62%
MAC	\$16.40	\$29.40	79%	\$20.30	70%

Power Five Conferences

	2005 Budget	2014 Budget	Percent Change	2014 Subsidies	2014 Percent Subsidy
SEC	\$49.70	\$105.60	112%	\$1.30	1%
Big XII	\$41.30	\$98.50	139%	\$2.70	3%
BIG10	\$59.70	\$106.60	79%	\$4.70	5%
ACC	\$41.40	\$87.80	112%	\$7.90	9%
Pac 12	\$35.40	\$82.80	134%	\$7.20	10%

DISCUSSION

From the results above, research (discussion) question 4 can clearly be stated that the financial impact from a cost perspective is directly related to the conference an institution belongs to and the overall financial wellbeing of each institution. In dependent of conferences, institutions with larger athletic budgets are those institutions that have more financial means in terms of academic research and private endowments to support the entire institution, including its athletics department.

An insight as to why these institutions are associated with the conferences they are currently members seems to be the overall financial health of the institution itself. Institutions that have large athletic budgets and belong to Power Five conferences are the same institutions with large research and endowment sizes. The question remains however, were these institutions able to grow their research and endowment size through success and national exposure in athletics; or were their athletic departments' success a result of the institutions' overall academic and private donations growth?

Walker (2015) found that elite athletics success has a significant increase in private contributions to the entire university, not just athletics. This research suggests that successful athletics may help grow private donations and thereby the total university endowment. As for research grants in relation to athletics, Keyton, Reifman, and Warnick (2012) controlling for university background characteristics such as years of existence, public/private, and endowment found that athletics success is positively related with enhanced academic research following such success. Interestingly, they also found a positive relationship between endowment size and research funding.

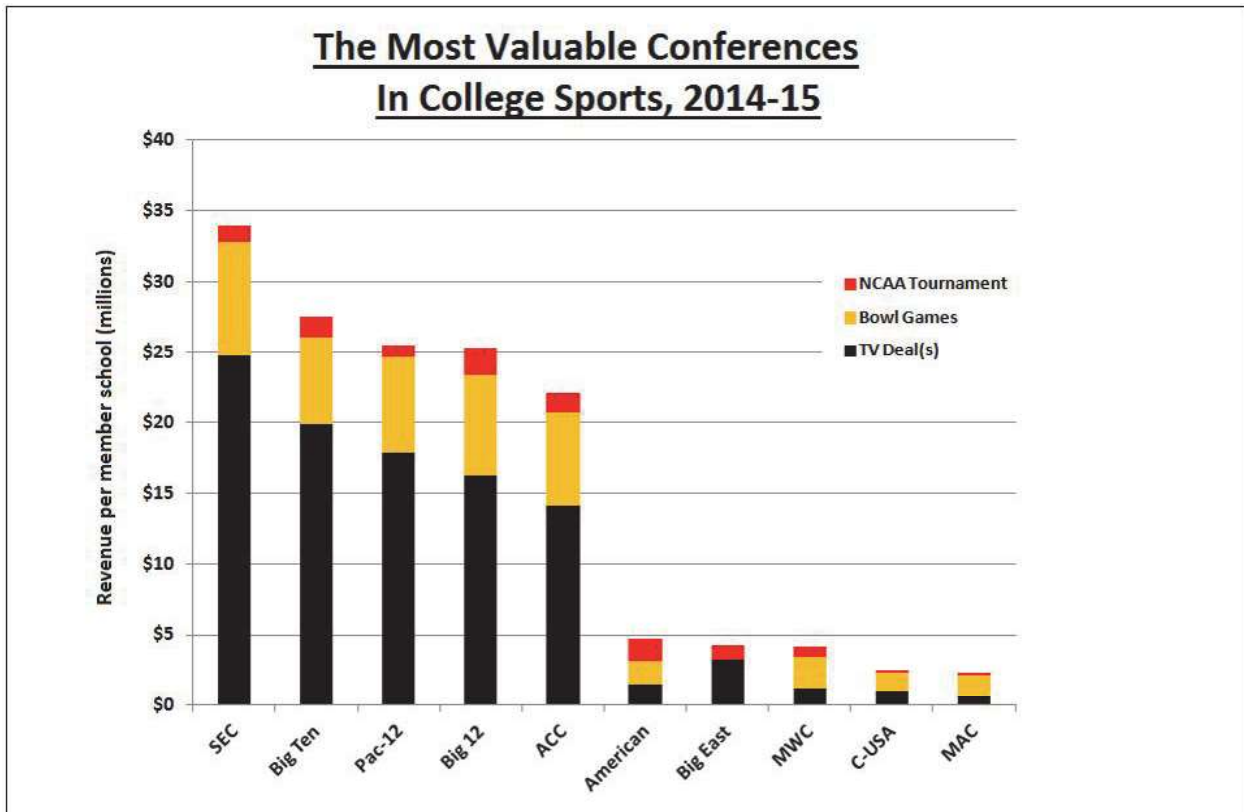
Tentative evidence was found for an overall, well-rounded athletic program possibly enhancing a university's research portfolio (Keyton, et al., 2012). They hypothesized that the latter finding may result from successful teams making a university more attractive to prospective faculty members (those who follow sports, at least) or athletic success signifying a robust campus atmosphere of activity, including not just sports and academics, but other extra-curricular endeavors.

There may also be indirect effects to public institutions in terms of state appropriations. Using data on 570 public universities, Humphreys (2006) found that those fielding Division I (FBS) football teams receive about 8% more from their state legislature than otherwise comparable universities that do not participate in Division I (FBS) football. Participation seems to be what matters. Success is less important. State subsidies appear to be no greater for universities with top 20 or bowl-participating football teams.

Overall athletic spending for Group of Five and Power Five institutions continue to soar; however, the gap between the two groups is also growing (more than double the gap than 10 yrs. ago- \$28M gap in 2005 vs \$65M in 2015). Exacerbating the divide between the two is the growing revenues of the Power

Five. Conferences approximate 2014-15 payouts per school in the Power Five: SEC \$32.7 million, Big Ten \$32.4 million, ACC \$27 million, Pac-12 \$25.1 million, Big 12 \$23.3 million (Solomon, 2016). This represents a revenue increase of 33% from 2015 to 2016 for these aforementioned conferences (Solomon, 2016). Meanwhile the Group of Five average payout per institution is \$2 million (Lavigne, 2016).

FIGURE 1



Source: Forbes, 2015

The discrepancy between these two groupings leads researchers to ponder is athletic spending sustainable? Figure 1 above, illustrates the growing gap between conferences in the Power Five and Group of Five (Forbes, 2015). Due to growing subsidies, this is especially a concern for Group of Five institutions. Compounding this struggle is the fact that these universities also are weaker in terms of research funding and endowment size (four times fewer dollars in both regards). This is ironic since the overall financial health is stronger for those institutions that have the means to support their athletic programs, but are the ones who do not have the need to be subsidized. These institutions are more robust financially as a whole to support the entire university (independent of athletic budgets). In fact, many Power Five institutions actually now subsidize the university Walker, 2015). LSU Athletics transferred \$10 million to academic initiatives in 2015, while receiving no academic subsidy (The Advocate, 2015). In regards to rising costs of athletic salaries, one example is Alabama's Nick Sabin, who signed a new contract that will pay him \$11.1 million annually (Berkowitz, 2017).

Future impacts of the new NCAA autonomous legislation could continue to put strain on budgets for Group of Five institutions. The future landscape could look very different in the near term as institutions decide which divisions to compete in and what sports to continue to sponsor financially. While costs continue to rise and new or additional revenue streams remain steady or decrease, many more institutions

not in the Power Five will be faced with the dilemma of eliminating sports (primarily men's sports) or decisions to alter NCAA classification for football and their entire department in the coming years.

FUTURE RESEARCH

Future research should center on the future impact and cost to implement autonomy NCAA legislation. Analysis should also focus on the rise in costs related to salaries, tuition, student-athlete well-being, and travel. Future research could also analyze future budgets, revenues, and subsidies of Power Five and Group of Five institutions.

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