

2011

# The Estimated Value of a Premium Division One Football Player: The Argument Supporting Pay for Play

Travis S. Roher  
*Claremont McKenna College*

---

## Recommended Citation

Roher, Travis S., "The Estimated Value of a Premium Division One Football Player: The Argument Supporting Pay for Play" (2011).  
*CMC Senior Theses*. Paper 184.  
[http://scholarship.claremont.edu/cmc\\_theses/184](http://scholarship.claremont.edu/cmc_theses/184)

This Open Access Senior Thesis is brought to you by Scholarship@Claremont. It has been accepted for inclusion in this collection by an authorized administrator. For more information, please contact [scholarship@cuc.claremont.edu](mailto:scholarship@cuc.claremont.edu).

**CLAREMONT McKENNA COLLEGE**

**THE ESTIMATED VALUE OF A PREMIUM DIVISION ONE FOOTBALL  
PLAYER: THE ARGUMENT SUPPORTING “PAY FOR PLAY”**

SUBMITTED TO

PROFESSOR MARC WEIDENMIER

AND

DEAN GREGORY HESS

BY

TRAVIS ROHER

FOR

SENIOR THESIS

SPRING 2011

APRIL 25, 2011



***Table of Contents***

I. Abstract.....3

II. Acknowledgments.....4

III. Introduction.....5

IV. Literature Review.....10

V. Data.....14

VI. Results and Analysis.....18

VII. Conclusion.....22

VIII. Accumulated Data.....24

IX. References.....26

## **I. Abstract**

The gap between the revenue generated by Division One football players and the value of an athletic scholarship is the marginal revenue product of these athletes. Because of the monopsonistic behavior of the NCAA, Division One institutions capture an economic rent from their student athletes. This paper measures the rents generated by NCAA Division One football players in the six powerhouse conferences by using linear regressions based on variables such as university revenue, future NFL draft picks, undergraduate population, and weekly AP Top-25 rankings. This paper will inform its readers on how much money these student athletes are generating for the NCAA and their respective schools, and will provide understanding as to why there has been so much controversy regarding the payment to NCAA athletes.

## **II. Acknowledgments**

Leading up to the completion of my senior thesis, I was fortunate enough to have the support of many people. First, I thank Professor Marc Weidenmier. Professor “W” helped me structure my topic, as well as each individual chapter. His guidance and encouragement helped me tremendously throughout the process. Professor Weidenmier took time from his busy schedule to guide and assist me. I greatly appreciate all of Professor Weidenmier’s much valued assistance.

Secondly, I thank my family for their support and wisdom. To my father, Neal, thank you for helping me pick a relevant and interesting topic concerning an issue I am passionate about. To my mother, Mindy, thank you for your frequent phone calls making sure I was working hard every day, they truly kept me on track! To my sisters Jaclyn and Fallon, thank you for being so supportive and caring. Thank you all for what you have done for me as I reach this academic and personal milestone.

Lastly, I thank my all of my friends at Claremont McKenna College. CMC is truly a unique place, and it’s people like you who make it that way. I consider myself extremely fortunate to have attended CMC and to have met all of you. Thank you all for your continued friendship and support from my first semester through the completion of my senior thesis.

### **III. Introduction**

Collegiate athletics is more prominent in the United States than in any other country. There are approximately 1200 member schools comprising the National Collegiate Athletic Association (the “NCAA”), which is structured into three Divisions (I,II, and III). At its highest and most competitive levels, the NCAA is responsible for creating the excitement of the BCS Championship Game, the roller coaster ride known as March Madness, the aura surrounding the Heisman trophy, and the College World Series. The constant televised imagery of NCAA games, highlights, and players helps fuel the passion that lead boosters and alumni to extreme, and often inappropriate and illegal behavior.<sup>1</sup> With the advent of billion-dollar television rights contracts, there is little debate that big time NCAA Division One collegiate athletics is big business.

There has been much controversy in recent years relating to payments, gifts, and so-called loans to student athletes and the NCAA rules prohibiting such largess. Is it the inherent nature of collegiate athletes to resist, bend or break the rules, or are the NCAA’s rules governing the conduct of today’s student athlete, in today’s marketplace, outdated and in dire need of change? One could argue that youth will

---

<sup>1</sup> “Alabama Fan Arrested for Killing Auburn Oak Trees.” Dashiell, Bennet. *Business Insider*, Feb. 17, 2011. <http://www.businessinsider.com/alabama-auburn-tree-deaths-2011-2>

always be pre-disposed to making poor decisions, but the problem is not new and is exacerbated by the economics of big time collegiate athletics.

One of the most prevalent controversies in Division One athletics is illegal payments to athletes. It is not rare to learn about a current or former Division One football or basketball player or program being suspended or otherwise penalized by the NCAA for accepting payments from a booster or an agent, or otherwise engaging in “illegal behavior”<sup>2</sup>. Recent college stars such as Reggie Bush, Dez Bryant, and AJ Green were all found to have accepted funds that were not NCAA sanctioned.<sup>3</sup> Such allegations cast a pall not only over the offending athlete (Reggie Bush had to return his Heisman Trophy) but over entire Universities (USC had to forfeit its past championship seasons, for example). Programs are crippled and as a result innocent student athletes can be left without the coaches that recruited them or the type of program they came to play for. It is not only the most famous college athletes who violate the rules, however. In an interview written by George Dohrmann for *Sports Illustrated* in 2010, former agent Josh Luchs conceded that he had paid over thirty college players to curry favor if and when they turned professional.<sup>4</sup>

One of the main goals of the NCAA is to maintain the association’s amateur status by prohibiting the payment or the giving of things of value to its athletes.

---

<sup>2</sup> “College Football and Crime.” Benedict, Jeff & Keteyian, Armen. *Sports Illustrated*. Mar. 2, 2011.

[http://sportsillustrated.cnn.com/2011/writers/the\\_bonus/02/27/cfb.crime/index.html](http://sportsillustrated.cnn.com/2011/writers/the_bonus/02/27/cfb.crime/index.html)

<sup>3</sup> “A.J. Green Case at Georgia Illustrates Hypocrisy of College Jersey Sales.” Travis, Clay. *AOL*. Sept. 8, 2010. <http://www.aolnews.com/2010/09/08/a-j-green-case-at-georgia-illustrates-hypocrisy-of-college-jers/>

<sup>4</sup> “Confessions of an Agent.” Dohrmann, George. *Sports Illustrated*. Oct. 18, 2010. <http://sportsillustrated.cnn.com/2010/magazine/10/12/agent/index.html>

According to NCAA rules, Section 2, Title V; “It is a violation of the NCAA rules for athletes to accept money or gifts while intending to remain eligible.” In light of the fact that many outstanding NCAA athletes come from underprivileged homes, do not have the financial ability to make ends meet once on campus, even with a full athletic scholarship, and cannot work because of the demands of their sport, one can begin to understand the temptations faced by an easily influenced young athlete. These facts, in conjunction with the gaudy revenue generated by the NCAA, which is then shared with the college or university as an additional revenue stream, begin to explain why paying certain student athletes may be justified.

Everyone involved in the execution of a Division One basketball or football game—from the University athletic department to ticket vendors, hot dog vendors, TV contractors, coaches, referees, and field crew—are all paid. One then wonders why the people actually providing the services upon which all the revenue is generated are the only ones not compensated. The degree to which these athletes are exploited is quite concerning. Because NCAA athletes are not deemed workers, they are not free to form a workers’ union. Like all athletes, they are subject to lose their “job” at a moment’s notice due to injury or the whim of a coach.

Some former NCAA athletes and state legislators are suggesting legislation that would allow paying student athletes a stipend beyond the value of their scholarship<sup>5</sup>. An athletic scholarship in Division One covers tuition, room and board, and in certain cases books for classes. However, most of the student’s living expenses

---

<sup>5</sup> “Scholarship Shortfall Study Reveals College Athletes Paid To Play.” *NCPA News Release*. March 26, 2009. [http://www.ncpanow.org/releases\\_advisories?id=0009](http://www.ncpanow.org/releases_advisories?id=0009)

are not covered by this scholarship. A report conducted by Ithaca College researchers found that a student-athlete's scholarship is \$3000 short of what former NCAA President Myles Brand called "cost of attendance."<sup>6</sup> Thus, not only are the generators of a billion dollar business deprived from participating in the revenue they help generate, they are not allowed to recover for daily living and necessary academic expenses for things like groceries, a haircut, a calculator, or a computer.

As there are supporters for "Pay for Play" there are those against it, claiming a free education and the help of the admissions office in gaining admission to the university are compensation enough. However, as stated earlier, the cost of attendance can typically exceed the value of the scholarship, and thus, financially underprivileged students are still faced with economic difficulties. Furthermore, the full value of the scholarship they do receive is often undermined by the system itself, which prohibits many student athletes from attending all classes and fully participating in the academic aspect of college life. Indeed the value of the scholarship can be minimal if the student doesn't attend class or graduate. It is an accomplishment today for a Division One football powerhouse to graduate half of its players.<sup>7</sup> In essence, a large, revenue-generating program could place virtually no importance on graduating its players, yet continually win championships for its school, earning many millions of dollars for the institution the NCAA. Thus, this hypocritical aspect of the NCAA is quite striking. As the NCAA claims one of its

---

<sup>6</sup> "NCAA Might Face Damages in Hundreds of Millions." Farrey, Tom. *ESPN The Magazine*. Feb. 21, 2006. <http://sports.espn.go.com/ncaa/news/story?id=2337810>

<sup>7</sup> "NCAA Football Grad Rates at All Time High, but Top Schools Falter." Wieberg, Steve. *USA Today*. Oct. 27, 2010. [http://www.usatoday.com/sports/college/2010-10-27-ncaa-graduation-rates-study\\_N.htm](http://www.usatoday.com/sports/college/2010-10-27-ncaa-graduation-rates-study_N.htm)

chief goals is “maintaining amateurism”, the NCAA seems more like a self-righteous, self-serving big business than an entity which truly has the best interests of its “workers”, the student athlete, at heart.

If legislation is signed and Division One football players are financially compensated beyond their scholarship, how much money would these players receive? Following the model of Robert W. Brown’s empirical study, my goal in writing this paper is to estimate the revenue generated by a premium power conference (ACC, Big East, Big 10, Big 12, Pac-10, SEC) Division One football player. Because Brown’s original data was collected prior to 1993, I updated the data set to account for years 2006 through 2009. With a more recent study dedicated to the payment and value of a premium college football player, I hope to provide some insight and new information on the monetary value generated by some of our country’s most recognized and talented student athletes and how that value can affect the current debate over whether or not they should be paid.

#### **IV. Literature Review**

There are many articles, inquiries, and studies which advocate the payment of NCAA athletes. The study on which I modeled my paper, “An Estimate of the Rent Generated by a Premium College Football Player” by Robert W. Brown, measures the economic rents universities capture from its football players. Brown uses variables such as universities’ revenue, recruiting pools, national prestige, and NFL draft status to determine how much revenue these players generate for their respective schools. Brown’s “Estimate” was published in 1993 and thus may be outdated. His study found, at that time, a premium college football player generated over \$500,000 for his respective team. My objective in conducting my own updated research and analysis is to find the current value of the revenue generated by premium college football players.

John Rooney, author of *The Recruiting Game* suggests a change to the NCAA system. In his book, Rooney proposes a reform to the traditional inter-collegiate sports infrastructure. The revenue sports in intercollegiate athletics would become semi-professional franchises located within university communities. Rooney’s main goal is to eliminate the many problems, scandals, and investigations that coincide with major revenue generating programs within the confines of American universities. His expertise in geography allows him to illustrate many recruiting patterns. In my study I will be modifying one of his indices- the pool variable. As

defined by Robert W. Brown in his study, the pool variable measures the number of recruits at each major school relative to the number of recruits produced in each respective state. By following some of Rooney's basic principles and practices, I was able to construct my own indices of recruitment and recruit population.

The article "Pay for Play for College Athletes: Now, More Than Ever" by Peter Goplerud discusses the possibility of paying a stipend to NCAA Division One athletes. The article discusses how these revenue-producing collegiate athletes are exploited on a regular basis and proposes a stipend system. Goplerud is in favor of a stipend, as he notes that a free education, expansion of social networks, and memorable life experiences alone are not sufficient payment. Goplerud discusses past trials regarding the NCAA and anti-trust issues. The paper also covers different legal issues and questions which may arise with the implementation of a stipend system for specified institutions. Gender equity, labor laws, and taxation issues are among these issues. The NCAA and its institutions do not recognize its athletes as employees for workers' compensation purposes for fear that doing so will reshape the mission of higher education institutions. Granting workers' compensation could also lead to athlete demands for salaries, collective bargaining, and benefits, including, disability payments for injuries sustained during participation of team activities.

In a related article, "Forward Progress? An Analysis of Whether Student-Athletes Should Be Paid", Christopher Parent (2003) reviews current legislation in place for the implementation of a stipend for revenue-producing athletes. The argument against "Pay for Play" is addressed in the article. The NCAA's primary argument against "Pay for Play" is to preserve the athletes' amateur status. The

NCAA defends its athletes' amateur status as the reason why there should be no payments beyond an athletic scholarship. Parent's article explains that the exploitation of collegiate athletes demonstrates the hypocritical nature of the NCAA.

As explained in many "Pay for Play" articles, the NCAA permits teams to generate millions of dollars of revenue for its respective institutions but does not require that the players graduate. Furthermore, the true value of an athletic scholarship cannot and is not being realized because of the low rate of graduation of collegiate football and basketball players. This problem is exacerbated with longer regular season and playoff schedules forcing students to miss more classes. Due to this perceived hypocrisy and exploitation of the student athlete, there are current legislative initiatives in place to better voice these concerns. As stated by Parent, separate initiatives signed by Senator Ernie Chambers of Nebraska and Senator Kevin Murray of California are pushing for a "Pay for Play" proposal.

Workers compensation is a major issue in the argument concerning "Pay for Play." However, as explained in Beckham and Mondello's "Workers' Compensation and Collegiate Athletes: The Debate Over the Pay for Play Model: A Counterpoint," there are some hurdles that lie in the way of payment of collegiate athletes. Advocates of "Pay for Play" have been largely unsuccessful in persuading state legislatures to reform workers' compensation laws to include student athletes. In addition, the judicial system has accepted the position that collegiate athletes are not employees. The largest obstacle in "Pay for Play" involves anti-trust regulations. The NCAA is governed on an amateur status and is thus exempt from the Sherman Anti-Trust Act. If collegiate athletes were granted employee status, it is possible that doing so could

bring about anti-trust claims against the NCAA, unions, wage negotiations, and other benefits.<sup>8</sup> Institutions would also be put in a hard position if they were to pay athletes of revenue-generating sports and not other athletes who dedicate equivalent time and energy to their respective sports.

Lawrence W. Kahn examines collegiate sports in the context of the theory of cartels. Many point to the attempts by the NCAA to restrict output and payments for factors of production as evidence of cartel behavior. Others argue that such limits enhance product quality by preserving amateurism. The author finds that the NCAA's compensation limits on athletes lead to high levels of rents from the entertainment revenues produced by the athletes. The athletes producing these rents are mostly African- American, while the beneficiaries are primarily white. The rents are typically spent on coaches' salaries, facilities, and non-revenue sports.

---

<sup>8</sup> "Forget Utah; Alabama Could be Key To Successful BCS Anti-Trust Suit." Staples, Andy. *Sports Illustrated*. Nov. 5, 2010.  
[http://sportsillustrated.cnn.com/2010/writers/andy\\_staples/11/05/bcs-antitrust/index.html](http://sportsillustrated.cnn.com/2010/writers/andy_staples/11/05/bcs-antitrust/index.html)

## **V. Data**

As a measure to define how much money each school generates via their football programs, the first variable defined is the **2009 Football Revenue** generated by each respective football program in the Atlantic Coast Conference, Big East, Big Ten, Big Twelve, Pac-10, and Southeastern Conference. The revenue of each program was found through the U.S. Department of Education's website for fiscal year 2009. In Division One athletics, a team's success is equated not merely by the wins and losses columns, but by the school's market exposure, TV contracts, Bowl Game appearances, ticket sales, donations, and apparel sales. College football has long been the most profitable sport among collegiate athletics. The vast amount of revenue generated by football and basketball programs is extremely important because without such revenue many non-revenue generating sports at colleges and universities would not be able to stay afloat. The most important factor in generating this revenue for the universities, as well as for the NCAA, is the athletes themselves. Without these athletes attracting millions of spectators and sponsors, most athletic programs would not only struggle to generate a profit, but certain sports would have to be cut from athletic departments. After looking at how much revenue is generated by these football programs through the efforts of the athletes, one can see why the claim of student-athlete exploitation is at the forefront of the "Pay for Play" debate.

Typically, a larger undergraduate population of a university results in a bigger, more successful athletic program. Furthermore, large universities often have a strong "school spirit" as well as enthusiastic, generous alumni who feel it is their duty

to give back to their alma mater. Because it is impossible to ascertain the exact number of fans each university has for its athletic teams, the variable *Undergraduate Population* serves as a substitute. This variable, like 2009 Football Revenue, was found on the U.S. Department of Education's website for academic year 2009. Though most schools in the major conferences have large undergraduate populations, this figure does vary.

One may define a "premium college football player" in a plethora of ways. Because there are so many collegiate football players in the top conferences, let alone all of Division One, the most suitable way to define a premium player is whether the player has been selected in the NFL draft. The *2006-2009 Draft Picks* variable consists of the total number of players drafted from each respective school from 2006 to 2009. This data was found by looking on the NFL's website of past drafts and analyzing the total amount of players selected by NFL teams for the years 2006 to 2009. In short, the more players selected in the NFL Draft, the more talented the team is considered. In college athletics, team skill is correlated with team success, and the more successful and/or exciting a team is to watch, the more revenue the team will generate through increased broadcasts, ticket sales, apparel sales, and other revenue sources.

Throughout the course of the season, the Associated Press releases a weekly Top 25 Ranking, beginning the week before the first game of the season and continuing until a week after the BCS National Championship Game when a final Top 25 Ranking is released. To find a team's average ranking, I collected each school's ranking for every week from the beginning of the 2006 season to the end of

the 2008 season. This variable is titled *2006-2008 Average Rank*. Not only does a high ranking detect a more successful team, but the best high school players may be more likely to select a school which has been consistently highly-ranked or has won a national championship in the recent past. Teams who were not ranked in the Top 25 were assigned a ranking of 26. For the variable *2009 Average Opponent Rank*, every school's 2009 schedule was collected. By looking at each team's opponent's average ranking for the 2009 season, the Average Opponent Ranking was found. A team with a relatively low numeric Average Opponent Ranking means they are playing, on average, more talented or successful opponents. A potential recruit can view this as a way to play against the best players in the country while being exposed on a national scale. Teams with a harder strength of schedule (a metric used in college football and basketball) are usually given the benefit of the doubt when selected for a post-season invitational or tournament.

In Robert Brown's "An Estimate of the Revenue Generated by a Premium College Football Player," Brown uses a variable employed in John Rooney's, *The Recruiting Game*. This variable is defined as the Pool variable. Based on the data which was available, I modified the name and definition of this variable, which I call the *Exposure Ratio*. Certain schools and universities enjoy an inherent advantage in the size and quality of the recruitment pool it can select from. For instance, colleges in Texas, where high school football is practically considered a religion, have available greater numbers of highly skilled local high school players compared to other regions of the country. Conversely, fewer high school athletes play football in

the northeast due to weather conditions and urban surroundings, typically resulting in less successful football programs in that area.

Although the Exposure Ratio is very generalized, it serves as a way to measure the differences in recruitment among schools and also shares insight into how much more effort some universities must exert to land highly touted high school players. A low Exposure Ratio for a school infers that a school is not located in a high-school football crazed surrounding and a program would thus need to exert more effort (money, time, the passing up on comparable recruits) to sign a talented recruit. Conversely, a school with a higher Ratio means there is more talent near the university and it thus would be easier for that school to sign local athletes. Universities located in talent rich high school areas are more easily exposed to local stars, and thus may exert more effort on other aspects of the football program outside of recruitment. I determined this ratio by first ascertaining all the high school recruits for years 2007 and 2008 from each state that has at least one power-conference school in it. I then divided the total number of high school recruits from each state for 2007 and 2008 by the number of power-conference schools in each state. I took that quotient and divided it by the number of recruits brought in to each school for 2007-2008. For example, the state of Arkansas had 39 high school football players in 2007 and 2008 that went on to play at a power-conference school. Because there is only one power-conference school in Arkansas (University of Arkansas) I took the total number of recruits from the state of Arkansas (39) and divided it by the number of recruits the University of Arkansas brought in for those two years (53). In this case, the Exposure Ratio is .73.

## **VI. Results and Analysis**

Once I finalized my data collection for each of the variables, I ran linear regressions to find an approximation of the value generated by premium college football players. In staying consistent in my research and analysis, I followed Robert W. Brown's formation and implementation of his regressions to use for mine. The variable 2009 Football Revenue was used as the independent variable. Variables Undergraduate Population, 2006-2009 Draft Picks, 2006-2008 Average Ranking, Exposure Ratio, and 2009 Average Opponent Rank were all used as the dependent variables. The independent variable was then run against all of the dependent variables. I ran three regressions, as Brown did, in order to ascertain the most accurate value possible. The output of these regressions proved to be significant as the Significance-F read less than .05 in all three cases. These regressions are included, and all can be seen on the following page.

Independent Variable is **2009 Football Revenue**

	<b>First Regression</b>	<b>Second Regression</b>	<b>Third Regression</b>
<b>CONSTANT</b>	75247968.8	108244961.3	108818127.4
<b>UNDERGRADUATE POPULATION (2009)</b>	675.197	592.077	604.891
<b>AVG.OPPONENT RANK (2009)</b>	-3000251.546	-3002038.56	-2972413.297
<b>2006-2009 DRAFT PICKS</b>	1038657.378	409652.603	457243.604
<b>2006-2008 AVG. RANK</b>		-1124192.508	-1141742.255
<b>EXPOSURE RATIO</b>			-1639075.07
n= 65	R <sup>2</sup> = .321	R <sup>2</sup> = .388	R <sup>2</sup> = .391

Using 2009 Football Revenue as the independent variable and the variables Undergraduate Population, Average Opponent Rank 2009, and Draft Picks as the dependent variables, the first linear regression showed a significant model ( $p < .05$ ). Undergraduate Population and Draft Picks were significant while Average Opponent Rank was not. The R-Square value is .321, which means that my data can predict 32.1 percent of any sort of trend occurring. Using these variables, the Coefficient of “2006-2009 Draft Picks” resulted in a finding that premium college football players each generate roughly \$1,038,657.38 each year. Though I followed Brown’s model, there are many reasons why the outputs from my regressions vary from his original

findings. The main reason for this is because I modified all of the variables at least slightly. Certain adjustments had to be made because of the fact that I am using different, more recent data to ensure that my results are reflective of the present time, and are not outdated. Furthermore, I was not able to contact each school directly to collect individual statistics regarding revenue sources. It was my intention throughout the completion of this project to conduct this study in a manner similar to Brown's paper while implementing my own adaptations.

The second regression appears to the right of the first regression. In the second regression, 2009 Football Revenues is again the independent variable, while Undergraduate Population, Average Opponent Rank 2009, 2006-2009 Draft Picks, and Average Rank 2006-2008 were all used as the dependent variables. The R-Square is .387, and Significance F is significant ( $p < .05$ ). Variables Undergraduate Population and Average Rank 2006-2008 showed significance while Draft Picks and Opponent Rank did not. Based on Brown's model, in this regression the revenue generated by premium players is \$409,652.60 per year. This value is much less than that of the first regression, but as mentioned previously, that is due to the differences in data and modifications of certain variables.

In the third and final regression, all variables except 2009 Football Revenue were included as dependent variables. Undergraduate Population and Rank 2006-2008 were the only variables that were significant. The estimated annual value of a premium football player is \$457,243.60 in this regression. Interestingly enough, this value is only \$50,000 less than that of Brown's value despite the 20+ year difference in data. Though I was expecting a value much greater than Brown's, because I

adhered to his model and his variables may explain why my value in the third regression is so similar to his original findings. Considering that I did modify my variables and some of the data that Robert Brown used was unavailable during my research process, this suggests that this may be a fair value to assign the best collegiate football players in the top-tier conferences.

Because of the large discrepancy between the first value of \$1,038,657.38 and the lesser values of \$409,652.60 and \$457,243.60, I ran additional regressions to find the variable(s) which account for the drop in values. The variable 2009 Football Revenue remained as the independent variable in each of these regressions. However, I ran these regressions all with different combinations of the dependent variables in order to determine which variable or variables accounted for this difference in values. After running these regressions, I determined that it was variable Undergraduate Population which accounted for this disparity. After running the regressions which excluded this variable, all of the values for the estimated generated revenue were in the range of \$501,172.89 to \$552,247. I then proceeded to run regressions with the variable Undergraduate Population. All of these values were in excess of \$1,000,000. It is clear that this variable is responsible for this great difference in values. By including this variable, the estimated revenue generated by premium football players is over \$500,000 than the outputs of the other regressions. By excluding the variable Undergraduate Population, the outputs were only approximately \$50,000 more.

## **VII. Conclusion**

The outputs I found for possible values of premium collegiate football players ranged from \$409,652.60 to \$1,038,657.38. The largest value I found (\$1,038,657.38) reflects greatly increased revenues generated by big time college football programs. Although much greater than the value found by Brown in his work, it is not a surprise because of the many years between our respective research. The two smaller values obtained in my second and third regressions were much closer together and much closer to the value found by Brown in 1993. These findings suggest that the value generated by the NCAA Division One football athletes for their schools, although not as great as my first value, has nevertheless been significant and constant for many years. There was a noticeable discrepancy between the first regression and the last two regressions. By running additional regressions, I determined that the variable Undergraduate Population was responsible for this.

The debate over “Pay for Play” continues to be necessary. It is the responsibility of the NCAA to keep pace with athletes and the sports industry. It is a common occurrence to read about the payment of illegal, under the table money to elite college athletes. Are the athletes themselves responsible for their actions? Yes. But I believe a system that ignores the monetary value of an athlete’s efforts is severely flawed.

This study was motivated by my interest and passion for college athletics. From the outside looking in, the NCAA and its labyrinth of rules and regulations often make no sense to the athletes, coaches and schools it governs. Like any successful income producing endeavor in our country, athletes who serve as

generators of such a large revenue pool should be entitled to participate, in at least some way, in the fruits of their labor. The payment of a stipend to these athletes not only would cover the cost of necessary items not covered by a scholarship, but at the very least would take away the excuse that under the table money is needed to make ends meet. I believe some sort of compensation is definitely in order.

One of the primary goals of this paper was to find an estimated monetary value of the amount of revenue some of the best collegiate athletes generate for their schools and the NCAA. All top-tier football programs have many people who contribute to their successes. While many non-athletes contribute to the success of a big time college athletic program, none contribute more so than the players responsible for the competition itself. The insight gained from researching and analyzing recent data concerning college football shows the significant sums these athletes generate for their schools. It is up to the NCAA and the supporters of “Pay for Play” to continue this important debate until the time when the value generated by these athletes approximates the value of what they receive in return. Only then can it be said that such big time athletics are not exploitive of the athlete.

## ***VII. Accumulated Data***

<i>School</i>	<i>Total Revenues 2009</i>	<i>Undergraduate Pop. (2009)</i>	<i>'06-'09 Draft Picks</i>	<i>2006-2008 AVG Rank</i>	<i>EXPOSUR E RATIO</i>	<i>2009 AVG OPP Rank</i>
Boston College	\$19,184,902	9,501	10	20.39	0.383	24.54
Clemson	\$30,994,503	14,326	14	21.70	0.777	24.09
Duke	\$16,109,324	6,400	0	26	0.601	22.69
Florida St.	\$18,958,861	27,513	17	23.70	2.01	22.69
Georgia Tech	\$24,870,064	12,351	12	23.60	2.48	23.53
Maryland Miami (FL)	\$11,540,368	24,520	12	23.85	1.3	24.20
UNC	\$24,631,029	9,268	18	25.33	1.93	19.66
NC State	\$22,077,550	17,267	8	25.58	0.58	22.92
Virginia	\$22,018,738	21,840	13	26	0.505	23.88
V.T.	\$19,004,653	13,849	15	26	1.15	22.78
Wake Forest	\$31,155,870	23,052	21	17.79	0.866	21.82
Cincinnati	\$10,227,922	4,511	10	23.79	0.641	23.823
Connecticut	\$13,325,304	18,128	10	23.89	1.565	24.05
Louisville	\$14,400,371	16,240	7	25.95	0.302	23.77
Pittsburgh	\$15,537,276	11,855	15	18.72	0.392	23.88
Rutgers	\$22,513,336	16,690	12	25.20	1.25	24.22
South Florida	\$19,494,261	27,537	10	22.16	2.14	23.71
Syracuse	\$16,562,391	22,563	4	21.93	2.01	23.02
West Virginia	\$19,152,691	12,731	8	26	0.547	22.48
Illinois	\$29,467,612	20,260	7	11.97	0.14	23.92
Indiana	\$25,301,783	30,319	5	25.62	0.86	22.01
Iowa	\$21,783,185	30,983	4	26	0.438	22.28
Michigan Michigan St	\$45,854,764	18,319	12	24.43	0.207	23.16
Minnesota	\$63,189,417	25,261	18	17.87	0.795	22.32
Northwestern	\$44,462,659	33,238	10	24.87	0.833	23.60
Ohio State	\$32,322,688	27,636	6	25.66	0.5	24.06
Penn State	\$22,704,959	8,499	3	25.83	1.102	23.65
Purdue	\$63,750,000	37,629	27	5.37	2.11	22.44
Wisconsin	\$70,208,584	37,077	18	18.68	1.52	23.65
Baylor	\$18,118,898	30,306	12	26	0.407	23.52
Colorado	\$38,662,971	27,145	14	18.64	0.47	23.65
Iowa State	\$14,355,322	11,880	4	26	2.11	24.44
Kansas	\$26,233,929	24,774	9	26	0.583	22.54
	\$19,974,924	21,081	4	26	0.183	23.60
	\$17,885,176	18,809	4	20.56	0.489	23.12

Kansas State	\$17,570,624	16,413	7	25.93	0.351	23.61
Missouri	\$25,378,066	22,325	11	16.70	0.96	22.62
Nebraska	\$49,928,228	17,737	14	23.95	0.283	24.05
Oklahoma Oklahoma St	\$58,295,888	17,131	18	7.79	0.524	21.79
Texas	\$32,787,498	15,266	4	22.75	0.43	23.22
Texas A&M	\$93,942,815	35,107	22	8.60	2.2	24.32
Texas Tech	\$41,915,428	35,344	9	25.39	2.25	22.56
Arizona	\$26,201,009	22,048	8	19.75	2.25	21.22
Arizona State	\$24,398,253	26,989	11	26	0.6	22.10
California	\$29,587,236	45,490	11	21.62	0.48	22.81
Oregon	\$24,421,437	24,796	16	19.08	1.717	21.35
Oregon St.	\$29,505,906	16,942	16	18.62	0.2	23.06
Stanford	\$19,056,237	15,041	13	25.83	0.2	21.81
UCLA	\$21,309,949	6,564	7	25.16	2.194	25.27
USC	\$22,298,856	25,772	7	26	2.394	22.88
Washington	\$29,080,117	15,984	37	5.16	2.135	22.82
Washington St.	\$33,919,639	28,052	3	26	0.44	21.67
Alabama	\$12,754,541	18,620	5	19.06	0.451	22.98
Arkansas	\$71,884,525	21,552	12	26	0.88	22.86
Auburn	\$48,524,244	13,534	12	23.50	0.734	19.84
Florida	\$66,162,720	18,385	17	18.31	0.8	21.91
Georgia	\$39,053,219	31,133	17	6.64	2.01	24.35
Kentucky	\$70,838,539	24,551	22	13.87	2.07	20.63
LSU	\$31,161,247	17,549	5	26	0.302	21.70
Mississippi	\$68,819,806	21,376	12	8.02	1.35	21.22
Mississippi St	\$28,409,774	11,972	7	26	0.594	22.61
South Carolina	\$14,551,275	13,206	2	26	0.516	19.08
Tennessee	\$58,266,159	18,881	0	23.81	0.598	21.14
Vanderbilt	\$56,593,946	19,686	15	20.62	0.69	21.15
	\$22,506,492	6,729	5	25.39	0.989	20.83

## **IX. References**

- “AP Top 25.” *AP Sports*. Web. Apr. 2011. Blair, Roger D, and Romano, Richard E. “Collusive Monopsony in theory and practice: The NCAA.” *The Antitrust Bulletin*, Vol. XLII, No. 1. Web. Spring 1997. <http://heinonline.org.ezproxy.libraries.claremont.edu/HOL/Page?handle=hein.journals/antibull42&collection=journals&page=681>
- Benedict, Jeff & Keteyian, Armen. “College Football and Crime.” *Sports Illustrated*. Mar. 2, 2011.
- Brown, Robert W. “An Estimate of the Revenue Generated by Premium Football Players.” *Economic Inquiry*, Vol. XXXI. Web.
- “College and Pro Football Schedules.” *FB Schedules*. Web. 12 Apr. 2011.
- “College Athletics Finance Database.” *USA Today*. Web. 12 Apr. 2010. <http://www.usatoday.com/sports/college/ncaa-finances.htm>
- Dashiell, Bennet. “Alabama Fan Arrested for Killing Auburn Oak Trees.” *Business Insider*, Feb. 17, 2011. <http://www.businessinsider.com/alabama-auburn-tree-deaths-2011-2>
- Dohrmann, George. “Confessions of an Agent.” *Sports Illustrated*. Web. 18 Oct. 2010. <http://sportsillustrated.cnn.com/2010/magazine/10/12/agent/index.html>
- Farrey, Tom. “NCAA Might Face Damages in Hundreds of Millions.” *ESPN The Magazine*. Feb. 21, 2006. [www.espn.com/ncaa/news/story?is=2337810](http://www.espn.com/ncaa/news/story?is=2337810)
- Gardner, Tim. “Maryland Coach Gary Williams: NCAA Could—and Should—Pay Athletes.” *USA Today*. Web. 22 Sep. 2010.
- Goplerud III, C. Peter. “Pay For Play For College Athletes: Now More Than Ever” *South Texas Law Review*, Volume 38. Web. 1997 <http://heinonline.org.ezproxy.libraries.claremont.edu/?hals/stexlr38&collection=journals&page=1081>
- Greene, Bob. “Is College Athletics a Sweatshop?” *CNN*. Web. 9 Apr. 2011. <http://www.cnn.com/2011/OPINION/01/09/greene.pay.college.athletes/index>.
- Kahn, Lawrence M. “Cartel Behavior and Amateurism in College Sports.” *Journal of Economic Perspectives*, Volume 21 No. 1. Web. Winter 2007. <http://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.21.1.209>

- Kahn, Lawrence J. "The Economics of College Sports." *IZA*, No. 2186. June 2006. <http://www.econstor.eu/dspace/bitstream/10419/34074/1/514361395.pdf>
- Lavigne, Paula. "The Money That Moves College Sports." *ESPN*. Web. 3 Mar. 2010.
- Mandel, Stewart. "TV Deals for Major Conferences." *Sports Illustrated*. Web. 24 July 2009. [http://sportsillustrated.cnn.com/2009/writers/stewart\\_mandel/07/24/tv](http://sportsillustrated.cnn.com/2009/writers/stewart_mandel/07/24/tv)
- "NCAA- History." *NCAA*. Web. 8 Nov. 2010.
- "NCAA Benches Georgia's A.J. Green." *ESPN*. Web. 11 Sept. 2010. <http://sports.espn.go.com/nfl/news/story?id=5547721>
- "NFL Draft History." *NFL*. Web. Apr. 2011.
- Parent, Christopher M. "Forward Progress? An Analysis of Whether Student Athletes Should Be Paid." *Virginia Sports and Entertainment Law Journal*, Volume 3: Issue 2. Web. Spring 2004. [libraries.claremont.edu/HOL/Page?handle=hein:journals/virspelj3&collection=journals&page22](http://libraries.claremont.edu/HOL/Page?handle=hein:journals/virspelj3&collection=journals&page22)
- Rasche, Charlotte M. "Can Universities Afford Pay for Play? A Look at Vicarious Liability Implications of Compensating Student Athletes." *The Review of Litigation*, Volume 16: Issue 1. Web. 1997. <http://heinonline.org.ezproxy.libraries.claremont.edu/HOL/Page?handle=hein.journal/s/rol16&collection=journals&page=219>
- Rooney, John F. *The Recruiting Game*. United States of America: University of Nebraska Press, 1980. Print.
- "Scholarship Shortfall Study Reveals College Athletes Paid To Play." *NCPA News Release*. Mar. 26, 2009. [www.ncpanow.org/releases\\_advisories?id=0009](http://www.ncpanow.org/releases_advisories?id=0009)
- Simonich, Milan. "Pay for Play? Nebraska Senator Pushes for College Athletes to Make a Profit." *Post-Gazette.com Sports*. Web. 30 Mar. 2003. <http://www.post-gazette.com/sports/other/20030330payplay0330p4.asp>
- "Forget Utah; Alabama Could be Key To Successful BCS Anti-Trust Suit." Staples, Andy. *Sports Illustrated*. Nov. 5, 2010. [http://sportsillustrated.cnn.com/2010/writers/andy\\_staples/11/05/bcs-antitrust/index.html](http://sportsillustrated.cnn.com/2010/writers/andy_staples/11/05/bcs-antitrust/index.html)

- Staples, Andy. "The State of Recruiting." *Sports Illustrated*. Web. 21 Jan. 2009.  
[http://sportsillustrated.cnn.com/2009/writers/andy\\_staples/01/20/recruiting/](http://sportsillustrated.cnn.com/2009/writers/andy_staples/01/20/recruiting/)
- Travis, Clay. "A.J. Green Case at Georgia Illustrates Hypocrisy of College Jersey Sales." *AOL*. Sept. 8, 2010. <http://www.aolnews.com/2010/09/08/a-j-green-case-at-georgia-illustrates-hypocrisy-of-college-jers/>
- Wieberg, Steve. "NCAA Football Grad Rates at All Time High, but Top Schools Falter." *USA Today*. Oct. 27, 2010. [www.usatoday.com/sports/college/2010-10-27-ncaa-graduation-rates-study\\_N.htm](http://www.usatoday.com/sports/college/2010-10-27-ncaa-graduation-rates-study_N.htm)
- Zagier, Alan. "Study: 'Free Ride' Still Costs Athletes." *National College Players Association*. Web. 2 Oct. 2010. [http://www.ncpanow.org/news\\_articles?id=0020](http://www.ncpanow.org/news_articles?id=0020)
- Zirkel, Perry A. "Intercollegiate Athletics: Who is Exploiting Whom?" *Journal of Law and Education, Volume 31: Issue 2*. Web. 2002  
[http://heinonline.org.ezproxy.libraries.claremont.edu/HOL/Page  
 handle= hein.journals/jle31&div=32&collection= journals  
 als&set\\_as\\_cursor=2&men\\_tab=srchresults&t  
 erms=31%20JL.%20&%20Educ.%20293&type=matchall](http://heinonline.org.ezproxy.libraries.claremont.edu/HOL/Page?handle=hein.journals/jle31&div=32&collection=journals&set_as_cursor=2&men_tab=srchresults&terms=31%20JL.%20&%20Educ.%20293&type=matchall)