

THE GREAT DIVIDE?  
NCAA DIVISION I ATHLETIC  
REVENUE AND STUDENT-  
ATHLETE GRADUATION RATES

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# BACKGROUND

- Recent high-profile court cases against the NCAA have highlighted the potentially exploitative relationship between college athletic programs and student-athletes
  - College athletics revenues have grown from about \$2.7 billion to over \$4.5 billion in the last ten years (Washington Post 2016).
  - The NCAA has made small concessions to compensate college athletes, yet they must retain amateur status.



# BACKGROUND

- A Marxian perspective suggests that student-athletes exchange their athletic labor for room, board, and the *promise* of a college degree.
  - In a capitalist system, owners of the means of production (athletic departments and the NCAA) will exploit workers (student-athletes) through the surplus value of their labor.
  - Members of minority groups may be particularly prone to exploitation.
- Athletic departments with greater net profits and higher paid coaches may be run in a more “capitalist fashion” than those that are not profitable or even self-sustaining.
  - Profits allow athletic departments to invest in further capital to maintain prestige, and head coaches are under great pressure to succeed.

# BACKGROUND

- Previous research on college athlete graduation rates has found that:
  - Football success (Tucker 1992) and basketball success (Mangold, Bean & Adams 2004) are negatively related to general student body graduation rates at “big-time” colleges.
    - Tucker (2004) later found a positive effect of football success and graduation rates.
  - Overall athletic program success decreases the graduation gap between athletes and non-athletes (Ferris, Finster & McDonald 2004).
  - Schools with “major” athletic programs have a larger gap between female and male graduation rates than “non-major” schools (Rishe 2003).
- To our knowledge, no prior study has examined the effect of athletic department profits *and* head coach salaries on *gaps* in graduation rates between multiple groups.

# BACKGROUND

- We ask three questions about the link between capitalist practices and the relative ability of student-athletes to earn a college degree at NCAA Division I schools:
  - Are athletic department profits and average head coach salaries related to the gap between athlete and non-athlete graduation rates?
  - Are they related to the gap between White and Black athlete graduation rates?
  - Are they related to the gap between female and male athlete graduation rates?



# METHOD

- Dependent variables are differences in six-year graduation rates (in percentages) between groups:
  - Athlete graduation rate – non-athlete graduation rate
  - White athlete graduation rate – Black athlete graduation rate
  - Female athlete graduation rate – Male athlete graduation rate
- NCAA Graduation Success Rate website ([ncaa.org](http://ncaa.org))

# METHOD

- Independent variables are
  - Overall profit (in millions of dollars) = revenue – expenses
  - Average salary of all head coaches (in thousands of dollars)
- U.S. Department of Education Equity in Athletics Data Analysis website ([ope.ed.gov](http://ope.ed.gov))

# METHOD

- Control variables that could potentially be related to both the DVs and the IVs include:
  - Division I classification: A (reference), AA, or AAA
  - Public (=1) vs. Private
  - Overall student population (in thousands)
  - Geographic region: South (reference), Northeast, Midwest, West
- Individual university websites

# METHOD

- Data were available for 334 of the 351 NCAA Division I schools for the 2007-08 academic year.
  - This was the most recent year that graduation rate data were available when the study began.
- We conducted a multiple regression analysis for each of the three dependent variables.
  - Profits and head coach salaries were entered as predictors in Model 1, followed by control variables in Model 2.

TABLE 1: DESCRIPTIVE STATISTICS FOR KEY VARIABLES

Variable	Mean	Std. Dev.	Range	<i>N</i>
Athlete/Non-Athlete Graduation Difference (%)	20.03	13.36	-12.00 – 60.00	334
White Athlete/Black Athlete Graduation Difference (%)	12.61	10.88	-33.00 – 47.00	312
Female Athlete/Male Athlete Graduation Difference (%)	12.71	7.29	-6.00 – 35.00	334
Net Athletic Department Profit (millions \$)	.89	3.01	0 – 25.52	334
Average Head Coach Salary (thousands \$)	132.53	121.86	16.97 – 757.04	334

TABLE 2: REGRESSION FOR ATHLETE/NON-ATHLETE DIFFERENCE

Variable	<u>Model 1</u>		<u>Model 2</u>	
	<i>B</i>	Std. Error	<i>B</i>	Std. Error
Net Profit (millions \$)	.02	.26	.15	.23
Average HC Salary (thousands \$)	-.04***	.01	-.02**	.01
Division I-AA <sup>a</sup>			-1.19	1.84
Division I-AAA <sup>a</sup>			5.60**	1.88
Public <sup>b</sup>			13.71***	1.65
Student Population (thousands)			-.70***	.12
East <sup>c</sup>			-2.42	1.83
Midwest <sup>c</sup>			2.16	1.62
West <sup>c</sup>			-1.39	1.75
Intercept	25.62***		20.61***	
<i>R</i> <sup>2</sup>		.15		.38

Notes. *N* = 313. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . Reference groups: <sup>a</sup>Division I-A, <sup>b</sup>Private, <sup>c</sup>South.

TABLE 3: REGRESSION FOR WHITE/BLACK ATHLETE DIFFERENCE

Variable	<u>Model 1</u>		<u>Model 2</u>	
	<i>B</i>	Std. Error	<i>B</i>	Std. Error
Net Profit (millions \$)	-.08	.23	-.18	.22
Average HC Salary (thousands \$)	.02**	.01	.01	.01
Division I-AA <sup>a</sup>			.05	1.83
Division I-AAA <sup>a</sup>			-4.50*	1.85
Public <sup>b</sup>			2.95	1.64
Student Population (thousands)			.09	.12
East <sup>c</sup>			-2.12	1.80
Midwest <sup>c</sup>			3.84*	1.60
West <sup>c</sup>			1.81	1.79
Intercept	10.16***		9.37***	
<i>R</i> <sup>2</sup>		.04		.15

Notes.  $N = 334$ . \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . Reference groups: <sup>a</sup>Division I-A, <sup>b</sup>Private, <sup>c</sup>South.

TABLE 4: REGRESSION FOR FEMALE/MALE ATHLETE DIFFERENCE

Variable	<u>Model 1</u>		<u>Model 2</u>	
	<i>B</i>	Std. Error	<i>B</i>	Std. Error
Net Profit (millions \$)	-.27	.15	-.32*	.14
Average HC Salary (thousands \$)	.01**	.00	.01	.00
Division I-AA <sup>a</sup>			1.94	1.12
Division I-AAA <sup>a</sup>			-2.72*	1.14
Public <sup>b</sup>			4.28***	1.00
Student Population (thousands)			.06	.07
East <sup>c</sup>			-1.92	1.11
Midwest <sup>c</sup>			.29	.99
West <sup>c</sup>			1.30	1.06
Intercept	11.59***		9.04***	
<i>R</i> <sup>2</sup>		.02		.24

Notes. *N* = 334. \* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001. Reference groups: <sup>a</sup>Division I-A, <sup>b</sup>Private, <sup>c</sup>South.

# DISCUSSION

- A Marxian perspective on college athletics is somewhat supported by our findings.
  - Higher average head coach salaries are related to smaller gaps in graduation rates between athletes and non-athletes.
  - Greater coach salaries are also predictive of larger gaps in graduation rates between White and Black athletes, but not after controlling for NCAA classification and geographic region.
  - Higher net profits are related to smaller gaps in graduation rates between female and male athletes, after taking into account other relevant factors.

# DISCUSSION

- Like all studies, ours has some notable limitations that point to direction for future research:
  - Graduation rates for the general student body include part-time students, overestimating the gap between athletes and non-athletes (Eckard 2010).
    - The Academic Progress Rate, not available for non-athletes, is also a flawed measure.
  - We have not yet separated revenue-generating sports from non-revenue sports.
    - Male football and basketball players make up only a small percentage of all NCAA athletes, yet having a successful overall athletic department can be part of a university's overall "brand."
  - There may be other critical variables that represent the capitalist nature of college athletic programs that we have not examined.
    - At the same time, trading athletic labor for a college scholarship may be a fair deal for many Division I college athletes.

# DISCUSSION

- Addressing the ever-escalating nature of college coaching salaries seems critical at this point.
  - Can modern college coaches still be considered educators, and who are they beholden to?
- More college athletes now realize the nature of their exploitation, but they are also receiving pushback from entrenched institutions and American society at large.
  - College athletes of the world, unite!

