Lauren Bierman
December 4, 1998

Writing Project

Bremmer, Dale S. and Randall G. Kesselring. "The Advertising Effect of University Athletic Success: A Reappraisal of the Evidence. "*Quarterly Review of Economics*, 33, 1993:409-421.

I used the *EconLit* database to find my article. I typed in the word athletic and narrowed my search to magazine articles published after 1990 and I received 24 hits. I chose the article because it is pertinent to me being a college student.

This article sets out to disprove an article published in 1987 by R.E. McCormick and M. Tinsley's, that said the reduction of university athletic programs could harm academic programs by reducing the average SAT score. This new study used recent data and improved specification that provides evidence that successful athletic participation does not provide any measurable academic benefits to the university.

There have been many debates between the relationship of intercollegiate sports and academics. Some argue that the increase in sports budgets divert resources from academics. Others, such as McCormick and Tinsley, argue that universities actually benefit academically from participation in big time athletics. The reason is that "successful" athletic programs render a university with the money to advertise, which then attracts a larger pool of applicants. If these applicants prove to be at least as academically talented as the pool of applicants available to the "unadvertised" institution, the college admisssion's office can be more selective in who they accept, thus improving the overall academic qualifications of the college. McCormick and Tinsley go so far as to say that "the elimination of large-scale athletic participation could have detrimental effects on… enrollment and academic standards." (McCormick and Tinsley, 1987, p.1108) However, this argument is based on the assumption that "athletic" advertising attracts additional applicants of the same average quality as non-athletic advertising and that they then can choose the students with higher scores. The more likely possibility is that athletic advertising attracts students less interested in academics and a more complete model of university entrance scores supports this theory.

McCormick and Tinsley's model assumed that various assets that the university possessed determined the average SAT score of incoming freshman. They also argued that SAT

scores were a function of ten variables: (1) the level of tuition, (2) faculty salary, (3) the age of the school, (4) the number of books in the library, (5) the level of undergraduate enrollment, (6) the ratio of students to faculty, (7) the amount of the endowment per student, (8) the number of Ph.D.'s awarded per faculty, (9) whether the school is private or public, and (10) the ratio of male students to the total number of undergraduates. They also used a binary, explanatory variable that indicated whether the school belonged to a major athletic conference. McCormick and Tinsley obtained all their data from 1971. The new study of 1989 attempted to acquire all the data included in McCormick and Tinsley's model. The resulting sample consisted of 132 universities, 53 of which participated in big-time athletics.

In many ways the results were similar. However, there was one major difference in the two sets of estimations. In 1971, the estimated coefficient for the sports dummy is positive and significant for all ten equations. In 1989, the estimated coefficient is also positive for every equation but it is much smaller in magnitude and never significant. This could lead to the conclusion that the sports dummy is nothing more than a nuisance variable. It was subjectively determined by McCormick and Tinsley in order to prove their hypothesis. It was possible their hypothesis could have been right but they chose an inappropriate variable to account for this effect. To test the hypothesis again, additional variables, which directly measure athletic success, were included in a more complete model of entrance scores.

For the new model, two variables were selected to account for the possibility of an athletic advertising effect. The first, referred to as FOOTBALL, consisted of the number of times a university's football team appeared in a major bowl in the ten years prior to 1989. The other variable, BASKETBALL, consisted of the number of appearances the university's basketball team made in the NCAA tournament for the same time period. Another problem that was found with the original model was it ignored to another major variable. Typically, public universities offer state residents a lower tuition rate than nonresidents. Consequently, a state's average SAT score should have a significant impact on the average SAT score at public universities. It was thus included as an interactive variable. A set of variables was selected. Variable selection was based on the regression results produced by both the 1971 and 1989 data. All insignificant variables were discarded.

The variables of most interest were the ones representing athletic success. The estimated coefficients for all three of these variables- the sports dummy, football, and basketball- are

insignificant. In fact the t-scores for all these variables were less than one. These t-scores provided no evidence for an “advertising” effect. Only two variables demonstrated any significance in this specification, the State SAT and the percentage of applicants accepted, but those two variables were not used by McCormick and Tinsley in their original study. Most notable is the lack of significance of any athletic variables. Neither the sports dummy nor the FOOTBALL or BASKETBALL variables had any significant impact on SAT scores.

McCormick and Tinsley’s conclusion that universities benefit academically from successful athletic endeavors was based on a flawed assumption and on a flawed variable. Variables that measure athletic success failed to reveal any significant impact on average freshman SAT scores. The assumption that a rise in student application leads directly to higher SAT scores does not necessarily follow. However, it is possible that “athletic advertising” attracts students with lower average SAT scores and merely allows admissions to pack classrooms with less able students.

The article was effective in disproving McCormick and Tinsley’s argument. It successfully proved that a university’s athletic participation supports no significance on the institution academically. Though the statistical data provided was difficult to understand, the overall conclusion was clearly presented. The case was well organized well and provided the background information needed to understand it. First it definitely explained McCormick’s old model and explained all of its flaws. It then explained step by step the process, with explicit details, how they arranged the new model. The article left nothing unexplained and was extremely thorough.