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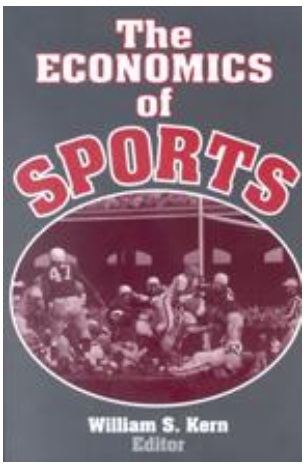
Academics, Athletics, and Finances



Richard G. Sheehan
University of Notre Dame

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Academics, Athletics, and Finances

Richard G. Sheehan
University of Notre Dame

In this paper I will present some statistics that attempt to relate collegiate athletics to finances and academics. I will not attempt to delineate the absolute relationship between athletic and financial success. My goal is more modest. I will be presenting instead some "data suggestions" that hopefully leave you with more questions than you came with.

Most of the data that I will present come from information released under the Equity in Athletics Disclosure Act (EADA), or the so-called Gender Equity reports. Every college that receives federal financial assistance in any form is now required to provide information relating to the distribution of a number of athletic variables by gender, including the number of athletes, the amount of financial aid, operating expenses, and implicitly, profits. These numbers are not without complexities. Each institution has its own accounting procedures, which typically are employed to facilitate internal decision making and not to ensure comparability with other academic institutions. Some of the reported numbers are therefore potentially misleading because of these accounting conventions. For example, one college might include telephone expenditures by the athletic department as a separate item charged to the department. Another might aggregate all telephone expenditures in a general account and may not explicitly charge the athletic department for its contribution to the overall bill. A few colleges require alumni to contribute a minimum amount like $100 to the university's general fund in order to be eligible to purchase football tickets. If 20,000 alumni make this contribution, $2 million per year is for the university's general fund that is really football-generated reve-

nue. These examples should not lead you to conclude that the Gender Equity numbers cannot be trusted but rather to conclude that they must be interpreted with care.

Table 1 contrasts the Big Ten with the Mid-American Conference (MAC), of which Western Michigan is a member. The top part of the table presents a mix of statistics on enrollment, athletes, and some expenditures. The table is configured to present the conference averages, maximum, minimum, and the ratio of the minimum to the maximum. The final column presents the MAC average divided by the Big Ten average. The ratio of the minimum to the maximum within a conference yields one perspective on the degree of inequality within a conference, the ratio of the MAC to the Big Ten yields a perspective on the degree of inequality between the two conferences.

In terms of enrollment, the typical Big Ten institution is substantially larger than the typical MAC school; the only exception is Northwestern. The mix of male/female students is roughly similar for the two conferences. Big Ten schools typically have somewhat larger athletic programs. Despite the larger number of male athletes at Big Ten institutions, the Big Ten comes closer to meeting Title IX gender equity guidelines. (An institution can satisfy Title IX if its percentage of female student-athletes is roughly comparable with its overall percentage of females.) Of Big Ten scholarship athletes, 38.0 percent are female versus only 33.1 percent of MAC scholarship athletes. That puts the percentage of female scholarship athletes 11.2 percent below the percentage of female students at Big Ten schools versus 19.6 percent at MAC schools. This comparison is particularly important for an individual school because it is one way that a school can certify that it is in compliance with Title IX.

What causes this greater differential in MAC schools? Certainly alternative explanations are possible, and I would like to advance two. First, since Big Ten schools typically are larger, one could argue that they have access to more students to fill their athletic teams. Thus, reaching Title IX compliance may be easier for a larger school. A fundamental problem with this explanation, however, is that most scholarship athletes are recruited before they come to college, not from the student body. The second explanation focuses on the schools' individual capacities for generating funds to finance Title IX compliance. Table 1 indicates that the Big Ten generates substantial net revenue

Table 1 The Big Ten versus the Mid-American Conference

		Big Ten				MAC				MAC avg./
		Average	Maximum	Minimum	Min/max	Average	Maximum	Minimum	Min/max	Big 10 avg.
Enrollment:	Male	13,232	18,765	3,734	0.199	8,200	16,708	5,075	0.304	0.620
	Female	12.628	18,230	3,870	0.212	8,701	11,470	7,026	0.613	0.689
	% Female	49.2	54.4	43.3	0.796	52.8	58.1	34.2	0.589	1.072
Athletes:	Male	378	470	230	0.489	294	389	227	0.584	0.780
	Female	234	327	148	0.453	148	194	80	0.412	0.632
	% Female	38.0	41.3	30.2	0.729	33.1	40.6	25.8	0.636	0.871
	Diff.[a]	11.2	18.5	5.9	0.317	19.6	27.8	5.1	0.184	1.756
Student aid:	Male	$2,180,218	3,511,825	940,226	0.268	1,293,892	1,841,996	962,659	0.523	0.593
	Female	$1,335,507	2,536,923	506,501	0.200	646,408	823,056	443,458	0.539	0.484
	% Female	38.0	43.3	33.5	0.774	33.4	37.5	27.6	0.737	0.880
Op. exp:	BB[b]/men's	$480,473	1,301,433	209,106	0.161	134,848	274,546	66,404	0.242	0.281
	BB/women's	$250,460	510,255	107,587	0.211	77,130	122,165	58,074	0.475	0.308
	Football	$1,150,187	2,984,934	337,712	0.113	375,449	679,236	143,629	0.211	0.326
Total op. exp:	Men's	$2,345,423	5,068,365	971,449	0.192	716,258	1,164,957	369,786	0.317	0.305
	Men's sports excl. football	$1,195,239	2,083,431	633,737	0.304	340,809	485,721	226,157	0.466	0.406
	Women's	$922,097	1.843.743	474,199	0.257	276,978	476,055	162,984	0.342	0.300

(continued)

Table 1 (continued)

		Big Ten				MAC				
		Average	Maximum	Minimum	Min/max	Average	Maximum	Minimum	Min/ max	MAC avg./ Big 10 avg.
Recruit exp.	Men	$363,116	490,983	236,941	0.483	97,263	147,180	55,840	0.379	0.268
	Women	$127,797	176,004	70,505	0.401	32,272	64,995	20,858	0.321	0.253
Salaries	Men	$69,708	88,896	57,920	0.652	49,710	59,656	41,129	0.689	0.713
	Women	$47,032	57,467	39,946	0.695	36,231	45,281	28,550	0.631	0.770
Football	Revenue	$10,763,264	17,840,445	6,132,085	0.344	722,893	931,836	496,989	0.533	0.067
	Expense	$3,373,603	5,005,180	2,145,986	0.429	1,607,180	1,945,850	1,291,434	0.663	0.476
	Net	$7,389,661	15,512,024	2,665,632	0.172	(884,286)	(493,397)	(1,339,009)	2.714	–0.120
Men's BB	Revenue	$4,551,187	6,142,915	3,044,999	0.496	268,220	513,208	115,152	0.224	0.059
	Expense	$1,057,599	1,777,364	683,077	0.384	452,225	594,609	324,109	0.545	0.428
	Net	$3,493,589	5,459,838	2,226,199	0.408	(184.005)	(35,314)	(325,524)	9.218	–0.053
Men's other	Revenue	$569,884	2,658,212	15,202	0.006	100,668	364,455	—	0.000	0.177
	Expense	$2,244,463	3,329,909	1,568,489	0.471	884,143	1,411,663	537,871	0.381	0.394
	Net	($1,674,579)	246,513	(2,839,902)	(11.520)	(783,475)	(469,230)	(1,298,749)	2.768	0.468
Men	Revenue	$17,530,360	26,017,272	12,143,588	0.467	1,158,998	1,433,468	698,288	0.487	0.066
	Expense	$7,626,141	12,919,483	4,820,083	0.373	2,979,663	3,437,448	2,205,850	0.642	0.391
	Net	$9,904,220	19,655,268	3,540,421	0.180	(1,820,666)	(1,133,421)	(2,328,427)	2.054	–0.184

Women	Revenue	$779,356	3,064,266	24,697	0.008	37,915	78,808	780	0.010	0.049
	Expense	$3,440,546	4,976,973	2,542,494	0.511	1,328,315	1,657,012	846,228	0.511	0.386
	Net	($2,661,190)	(924,360)	(4,685,316)	5.069	(1,290,401)	(839,690)	(1,586,915)	1.890	0.485
Overall	Revenue	$22,901,272	35,887,000	13,419,690	0.374	3,961,769	7,641,186	1,313,574	0.172	0.173
	Expense	$19,448,095	36,302,000	7,391,879	0.204	5,781,812	7,455,973	4,466,822	0.599	0.297
	Net	$3,413,177	18,730,905	(2,755,305)	(0.147)	(1,820,043)	185,213	(3,998,809)	–21.590	–0.533
Revenue (%)	Football	47.6	62.9	37.4		33.4	64.9	6.5		
	Football + BB	69.7	99.4	53.0		52.6	99.9	12.1		
Cost (%)	Football	17.3	13.8	29.0		27.8	26.1	28.9		
	Football + BB	22.7	18.7	38.3		35.6	34.1	36.2		

[a] The "average" columns show the difference between the percentage of females enrolled and the percentage of females who are athletes. The "min/max" columns show the ratio of the maximum and minimum values for this difference.

[b] BB = basketball

from its football and men's basketball programs and the MAC generates relatively little net revenue from these sports. Thus, the Big Ten has a ready source of funds for subsidizing women's sports and complying with Title IX. One could argue that it is substantially easier for the Big Ten to be able to afford to comply with the law. The data do not prove that contention, but they certainly appear to suggest it.

Following the statistics on athletes in Table 1 are statistics on student aid, operating expenses for three sports (men's basketball, women's basketball, and football), total operating expenses for men's and women's sports, recruitment expenditures, and salaries. These numbers suggest two basic conclusions.

Looking at the last column, the MAC average is consistently a small fraction of the Big Ten average. The average coach's salary in the MAC is about 75 percent of his or her Big Ten counterpart's. Recruiting expenses are only 25 percent as high. Student aid is about 50 percent of the Big Ten average, and total operating expenditures are roughly 30 percent of the Big Ten average. Thus, I have a very simple question. Does anyone believe that across the board, year-in and year-out, the MAC can compete with the Big Ten? The expenditure numbers suggest that the playing field is not level and that when MAC schools play Big Ten schools, you should expect a mismatch. Now one might be tempted to argue that the discrepancy in expenses is only in Big Ten football. Unfortunately, that is far from the case. MAC expenditures for female teams are also only 30 percent of those in the Big Ten. You might alternately argue that higher Big Ten expenditures reflect their greater number of athletes and, therefore, more teams. That also is far from the case. On a per athlete basis, MAC expenditures are still less than 50 percent of Big Ten expenditures.

Why do we observe a discrepancy between Big Ten and MAC expenditures? There are many hypotheses. Big Ten institutions may have more legislative clout. They typically have more alumni. They generally have longer athletic traditions. They may place greater emphasis on intercollegiate athletics. Regardless of these hypotheses, we will see in the bottom half of Table 1 that Big Ten schools definitely generate more athletic revenue. I will leave it to you to postulate which reasons are more important.

The second half of Table 1 presents revenues and expenses for various sports and categories, as well as for the overall athletic program.

Perhaps the most dramatic difference is in terms of football programs. The typical MAC football program is but a shadow of the typical Big Ten program. It is important to note, however, that athletic expenditures at the typical MAC institution are roughly 50 percent of those at a Big Ten school, but MAC revenues are less than 10 percent of the Big Ten average. Why the dramatic difference? Again, the numbers are suggestive but not definitive. One could argue that the marginal expenditures of the Big Ten so elevate their programs that they obtain the best athletes and coaches and can produce the best product, which is then marketed for millions of dollars in packed stadiums. Alternatively, one could argue that the tradition of the Big Ten has elevated the programs and generated their financial success. Or one could argue that the prior financial success of the Big Ten has bred a tradition that generates further financial and on-the-field success. In any event, the bottom line is that Big Ten football is a very lucrative endeavor on average, while MAC football is not.

Comparing averages in the Big Ten and the MAC, however, masks one other important difference in the conferences. There is much greater variation in the Big Ten than in the MAC in terms of football profitability. MAC losses range from $0.5 million to $1.4 million, a span of less than $1 million. In contrast, Big Ten profits range from $15.5 million to $2.7 million. There are a few teams that dominate Big Ten football profits: Michigan, Ohio State, and Penn State. On a year-in and year-out basis, these same teams are also at the top of the rankings, and one might readily argue that the correlation is not an accident. Three schools dominate Big Ten football profits and victories while no school dominates MAC football profits (or smallest financial losses) or victories. It appears then that rough financial parity has produced approximate on-the-field parity as well.

For men's basketball, the story is virtually identical to men's football. The only difference is the magnitude of the numbers. MAC expenditures run almost 50 percent of Big Ten expenditures, but revenues are less than 10 percent of the Big Ten's. The good news for MAC basketball is that, on average, MAC schools almost break even.

For other men's sports (so-called Olympic sports or nonrevenue sports), the situation changes dramatically. All schools in the Big Ten and the MAC lose money on these programs; the only difference is the magnitude of the losses. MAC schools spend only about 40 percent of

what Big Ten schools spend. The revenues in all cases are trivial compared with the size of the athletic budget. The good news for the MAC is that it loses much less money in nonrevenue sports than the Big Ten. The bad news for the MAC is that it loses less money because it spends less, and one might reasonably project that spending less means winning less.

Given the substantial financial losses shown in Table 1 for other men's sports, one might reasonably ask why schools spend so heavily on these programs? One possible answer is that the National Collegiate Athletic Association (NCAA) requires a school to offer a minimum number of sports programs to field a Division IA football program, but that minimum does not appear to be a binding constraint on schools in the Big Ten or the MAC. Why, then, do they spend? If they lose money and if they are not required to keep at least some of these programs, why offer them? The acceptance of financial loss in these programs suggests that the entertainment value placed on them is higher. (One might argue that there is an educational value as well, but that argument would be more appropriate for intramural activities than for intercollegiate sports.)

Men's programs (all sports combined) generally are profitable in the Big Ten but not in the MAC. The logic is simple. In the Big Ten, football profits in particular make men's programs in general profitable. In the MAC, no football profits exist to offset other losses.

For women's sports, the story is similar to that for men's sports other than football and men's basketball. Expenses are higher in the Big Ten than in the MAC, and revenues for both are but a fraction of expenses. (Women's revenues, however, are dramatically higher in the Big Ten.) Once again, financial losses are lower in the MAC, but that simply reflects the lower expenses. Returning to Title IX, Big Ten schools fit the model frequently advanced that football "pays the bills" and allows schools to offer a wide-ranging women's athletics program. However, MAC schools dramatically contradict that model because there are no football profits to offset other losses. In fact, the MAC schools face even greater difficulties in complying with Title IX. That is, total men's losses average $1.9 million, and total women's losses are only $0.8 million. In the case of schools with roughly 50 percent female students, an economist might argue that the financial subsidies to men's and women's programs should be approximately equal to

meet the spirit of Title IX. The numbers in Table 1 suggest that could be done in alternative ways, for example, spending $1.1 million more on women's sports. However, all alternatives would impose potentially severe constraints on MAC schools because they lack financial resources.

The last four rows in Table 1 show the percentage of total revenues and expenses stemming from football and from football plus men's basketball, the two generally perceived "cash cows" of intercollegiate athletics. Institutional vagaries distort the maximums and minimums here, but the averages are revealing and suggest that football and men's basketball do generate the majority of revenues. However, although football programs in particular are perceived to be "gold-plated"—getting the most expensive versions of everything—the self-reported accounting numbers suggest that football does not comprise the majority of costs. The averages suggest that football and men's basketball do generate the majority of revenues, but they are not responsible for a majority of the expenditures.

Table 2 presents data from a more aggregate perspective. Rather than considering only the Big Ten and the MAC, Table 2 presents more limited summary information for all Division IA schools.[1] In general, the results are consistent with those in Table 1. Football and men's basketball are profitable, but other men's sports and women's sports

Table 2 Revenues and Expenditures at Division IA Schools

	Football	Men's basketball	Other men's sports	Women's sports
Division IA schools				
Revenue ($, millions)	6.27	2.40	0.24	0.59
Expense ($, millions)	3.26	1.02	1.28	2.42
Mean profit ($, millions)	3.01	1.38	–1.05	–1.83
Median profit ($, millions)	1.17	0.75	–0.98	–1.68
Division IA schools with a profit				
Reporting profit	71	75	3	4
Actual profit	38	61	0	0

SOURCE: Gender equity reports.

are not. The table reports both mean and median profits, because the distribution of football profits—and to a lesser extent the distributions of revenues and expenditures—is not a normal or bell-shaped distribution. A few schools make sizable profits like Michigan, Ohio State, and Penn State in the Big Ten. However, a small army of schools either barely break even or lose money, like all schools in the MAC. The mean profits of $3 million for football gives a misleading picture of the actual profit position of the typical Division IA institution, for which the median profit is only about $1.2 million.

Even that last number is misleading. The EADA reports from which these statistics are derived refer only to operating costs. Other costs such as debt service and administrative overhead can easily run in excess of $1 million. Thus, actual profits are likely much closer to zero than reported profits at the typical institution. For the Michigans and Ohio States, subtracting even $2 million in omitted costs only slightly changes the degree to which the football program is lucrative. For schools at the median, however, $1 million in increased costs dramatically changes reported profits.

The last rows in Table 2 indicate the number of programs reporting profits and the programs actually having profits after making adjustments for accounting peculiarities, debt service, and administrative overhead. The EADA reports suggest that about 75 percent of the 99 schools with complete reports make a profit in both football and men's basketball, and almost none make a profit in other men's programs or in women's programs. After adjusting the numbers to reflect all costs, however, the percentages with a profit drops to less than 50 percent in football, roughly 60 percent in men's basketball, and 0 percent in either other men's sports or in women's sports. The implication? Institutions that have large sports programs should receive substantial nonfinancial utility from those programs to make the expenditures worthwhile, or should at least believe that those programs and their publicity create additional student applications and a larger or higher-quality student body.

Table 2 presents a snapshot in time of the distribution of profits at Division IA football schools. How have profits changed over time? Focusing on football and men's basketball, the only programs with profits, the growth rate in average profits from 1983 to 1996 has been about 7.6 percent per year. This increase appears to be substantial and

suggests that profits might improve dramatically even at institutions now currently suffering substantial losses. Unfortunately, that growth in profits has been highly uneven both over time and among institutions. In some years, profits at Division IA football schools have grown over 20 percent, and in other years they have actually decreased. In addition, profits at schools like Michigan have increased substantially while losses at MAC schools have shown no sign of abating.

Table 3 shows mean profits by conference as well as the 11 most profitable football and men's basketball programs. The numbers suggest that the best conferences do very well. The Southeastern Conference (SEC) and the Big Ten average profits of $8.6 million and $7.4 million, respectively, in football. In basketball, the Atlantic Coast Conference (ACC) joins them at the top. Again, it should be clear that some conferences—and by extension some schools—do very well, while others are engaged in a continuing financial struggle. Given the caveats mentioned already, it would appear that the Big Ten and the SEC as a whole are in strong shape. The ACC, Big East, Big 12, and Pacific–10 Conference (PAC) are generally surviving while the Western Athletic, USA, and Mid-American conferences are struggling to stay afloat. Again, I must note that some schools in almost every conference are doing well while others are not.

Table 4 presents profits of the 11 most profitable collegiate football and men's basketball programs. Arguably, the rankings are suspect because of institutional accounting inconsistencies. However, the results suggest certain points. First, some schools are very financially successful. The table includes representatives of the PAC (1), the SEC (5), the Big Ten (3), the Big 12 (1), and an independent. You might argue that Michigan or Notre Dame or Tennessee deserves to be ranked much higher, and I would not argue with you. Nevertheless, the point is that the most profitable football schools generate substantial revenue—even though their overall net revenues from football are relatively small. Second, looking at the list of most profitable football schools, one cannot avoid a comparison with the more traditional top 25 rankings; in particular, every school on the list is a regular in the top 25. Is that an accident? I sincerely doubt it. But the numbers—and the presumed correlation—cannot indicate causation. That is, does winning generate profits? Or does generating profits allow you to keep on winning? I will come back to this point shortly.

Table 3 Mean Profits by Conference[a]

Conference	Football ($, millions)	Men's basketball ($, millions)
Southeastern	8.60	2.60
Big Ten	7.39	3.49
Pacific–10	4.78	1.44
Big 12	3.46	1.26
Big East	3.09	0.81
Atlantic Coast	2.49	2.79
Western Atlantic	0.22	0.48
Conference USA	–0.70	1.19
Mid-American	–0.79	–0.20

[a] All calculations are based on all Division IA schools providing usable cost and revenue data in compliance with the Higher Education Act. All data are self-reported.

Table 4 The Eleven Most Profitable Programs[a]

	Football		Men's basketball	
Rank	School	Profits ($, millions)	School	Profits ($, millions)
1	Washington	20.3	Louisville	6.9
2	Florida	19.8	Arkansas	6.1
3	Auburn	16.8	Indiana	5.5
4	Penn State	15.5	North Carolina	5.4
5	Georgia	14.3	Arizona	5.3
6	Michigan	12.1	Kentucky	4.7
7	Alabama	12.1	Ohio State	4.6
8	Notre Dame	11.6	Iowa	4.1
9	Tennessee	11.3	Nebraska	4.1
10	Texas A&M	10.4	Florida State	3.8
11	Ohio State	10.2	Michigan	3.7

[a] All calculations are based on all Division IA schools providing usable cost and revenue data in compliance with the Higher Education Act. All data are self-reported.

The numbers in Table 4 also agree with those in Table 1 and show that football schools do not compete on a level field. In fact, no school from a "mid-major" or lower-rated conference appears on either top ten list. (One might argue that Louisville's ranking at the top of the men's basketball list is a contradiction. However, I would also argue that Louisville's ranking is likely boosted by institutional accounting since its EADA report indicates revenues almost $600,000 more than Kentucky's, a similar but potentially richer program, and costs less than 60 percent of Kentucky's.) Can a school other than a traditional power crack the top 10? The numbers suggest that it is dramatically easier for an institution like East Carolina or UNLV to break into the top echelon on the field than it is to break into the top tier in profits.

Let me next briefly address the question of causation. Does winning generate profits, for example? The evidence again must be viewed as suggestive rather than definitive. Statistical analysis (regression) of revenues does not indicate any strong relationship. In particular, it appears that winning more football games does not increase revenue but that a higher poll ranking does marginally improve profits. While that finding may appear contradictory, it should not be entirely unexpected. If Western Michigan and Michigan both win one additional game, will the win work to increase their revenues? The statistical answer is probably no. However, if Michigan is ranked slightly higher in the polls, will the elevated ranking increase its revenues? The statistical answer is likely yes. (One should also note that winning more would mean a higher ranking, so there could be a more indirect relationship between winning and revenues.) It might not be possible for Michigan to sell any additional tickets because they generally play before a full house. However, the school may become eligible for a better bowl or receive additional television revenue.

In terms of causation, what may be the most interesting result is that revenues appear to be largely driven by expenses. Based on the results shown in the previous tables, this interaction should come as no surprise. However, the question really should be about the magnitude of the increase in revenues. That is, if a school increases expenditures by $1, should it expect to increase revenues by more or less than $1? The answer to this question varies dramatically by sport. For other men's and women's sports, a $1 increase in expenditures increases revenues by $0.25 to $0.35 (Sheehan 2000). The implication? If a school

wants to spend more money on these programs, it should feel free to do that, but it should not expect to earn its money back in increased revenues. For football, a $1 increase in expenditures generates approximately $1 in additional revenue (Sheehan 2000). The implication? If a school wants to keep throwing money at football, on average it will be no worse off with revenues increasing with expenditures. Thus, any incentive to follow this strategy must be based on a desire to win rather than a desire to make money.

The most interesting case is men's basketball, for which each $1 increase in expenditures is expected to produce approximately $2 in additional revenue (Sheehan 2000). This result may initially appear surprising, but I contend it is quite consistent with developments in Division I basketball. If schools generally observe that basketball expenditures are profitable, then they should invest in their basketball programs. The NCAA has myriad restrictions limiting institutions from simply dropping buckets of money into any sports program. However, the NCAA has few restrictions on schools adding basketball programs. The result? Almost 100 institutions have moved to Division I in basketball, arguably because they are investing in their basketball programs.

Finally, in terms of causation, one could ask whether schools use football revenues to subsidize other sports programs? (I focus on football rather than men's basketball because few schools generate enough net revenue from basketball to contribute appreciable subsidies to other sports programs.) The results suggest that higher net football revenue is associated with higher expenses in other men's and women's programs. For each $1 increase in football net revenue, regression results suggest that other men's expenditures rise by about $0.10 and women's expenditures rise by about $0.20 (Sheehan 2000). These numbers have two implications. First, although the values sound very small, top programs like Penn State share substantial additional revenues with women's sports. In fact, its football profits of $15.5 million give Penn State's women's sports about $3 million more to spend. Of course, there is also a downside. For a program like Tulane that lost $3.3 million on football, women's expenditures would be predicted to be down about $0.6 million. Second, if for each dollar of football net revenue, $0.10 goes to other men's sports and $0.20 goes to women's sports, where does the other $0.70 go? The answer, assuming no increase in

Table 5 Graduation Rates (1997)

Graduation rates	Big Ten average	Division IA average	10th percentile	90th percentile	MAC average	MAC avg./ Big Ten	Athletes/all students[a]
All students	71.1	58.6	36.0	83.6	53.0	0.745	
Athletes	67.7	58.6	40.5	76.4	60.7	0.897	0.999
All students							
Black/M	45.4	39.3	18.0	65.8	32.2	0.710	
White/M	71.4	57.9	34.0	84.8	51.4	0.720	
Total/M	69.7	56.1	32.3	82.7	50.3	0.721	
Black/F	52.5	48.1	26.0	69.8	38.4	0.731	
White/F	74.5	63.0	41.2	88.0	56.4	0.757	
Total/F	72.6	61.1	38.6	84.7	55.1	0.759	
Athletes							
Black/M	49.4	43.2	23.0	67.8	43.0	0.871	1.099
White/M	66.5	57.7	40.2	75.0	59.7	0.897	0.997
Total/M	62.2	53.3	34.4	74.4	56.6	0.910	0.950
Black/F	66.8	62.5	33.0	92.0	60.3	0.902	1.300
White/F	82.0	70.1	52.4	88.0	69.6	0.849	1.112
Total/F	79.4	68.8	51.2	87.0	68.4	0.862	1.125
Football							
Black	51.8	43.9	20.0	66.0	46.5	0.897	1.118
White	71.0	61.9	46.0	79.0	63.7	0.897	1.070
Total	62.0	53.1	36.0	76.0	56.8	0.916	0.948

[a] Values calculated using data in “Division IA average” column.

administrative overhead, is that it would go back to the general fund of the institution. That is, colleges that have football profits are using those profits to subsidize the academic enterprise.

To this point I have said very little about academics, despite the title of this paper, which places academics first. Table 5 presents some statistics on graduation rates, which, although far from the only measure of academic performance, are the only readily available measure. Table 5 presents Big Ten and MAC average graduation rates as well as the average rates for all Division IA football schools and for the 10th and 90th percentiles. The table presents the graduation rates of the general student body and of athletes by sex and race. The last column shows that athletes—even football players—graduate at roughly the same rate as other students. In general, this is good news. (Basketball players, however, do not graduate at the same rate as the general student population.) Before any congratulations are handed out to football players and other athletes, however, a strong word of caution is in order. Athletes toil under substantial additional constraints because they must spend many hours in training or in sometimes intense competition. Critics of the current grant-in-aid system label their efforts "work" rather than athletics. Offsetting this cost, however, are some substantial benefits. In particular, athletes' grants-in-aid allow them to be full-time students without the distraction—at least until recently—of working to fund their tuition or board. In addition, they frequently have additional academic advantages, such as tutors who are not available to or are very expensive for a typical student. Thus, one might ask whether we should expect athletes to graduate at a higher rate than the student body in general.

Another frequently expressed concern is that major athletic programs place more emphasis on winning than studying and thus the most stress on student-athletes—or perhaps more accurately, on athlete-students. The results in Table 5, however, suggest that there is no support for this concern. If athletic competition were too stressful, we should expect to see lower graduation rates in the Big Ten than in the MAC. But, although the rates are close, Big Ten athletes have graduation rates that are slightly higher than those in the MAC. This result should not be surprising, however, given the results already presented. The Big Ten has dramatically more financial resources than the MAC.

To the extent that Big Ten schools value high graduation rates, they clearly have the ability to provide the resources to achieve that goal.

In summary, what should you conclude based on these statistics? I would argue that there are three general conclusions. First, athletic success and financial success are intimately related. Big-time schools with tradition and reputation may make money with their athletic programs; others do not. Furthermore, a "have-not" school has virtually no chance of changing (unless it cheats, but that is another story). Second, athletic programs generally cross-subsidize within their campuses. That is, the schools that make money can and do use those profits to improve nonrevenue sports as well as the institution's general academic program. However, the many schools with losses in their athletic programs are effectively using revenue generated from the academic arena to subsidize sports. There may well be a sound logic for this subsidy, but academics should insist that it be justified explicitly. Third, the academic enterprise is relatively insulated from the athletic enterprise except for what is often a relatively small financial link. Anecdotal evidence such as stories of the so-called "Flutie effect," in which applications double after a stunning athletic event, also link athletics to academics. However, the statistical evidence of any link is less than overwhelming. That should not imply that academics can safely ignore the athletic enterprise. It does, however, suggest that the athletic enterprise is likely to neither save nor destroy an institution.

Note

1. Table 2 excludes institutions not providing complete information: Boise State, Boston College, Houston, Michigan State, Pittsburgh, Rice, and Syracuse. In addition, it excludes the three service academies because they do not award athletic scholarships, and all students attending the academies receive full scholarship assistance.

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William S. Kern
Editor

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W.E. Upjohn Institute for Employment Research
Kalamazoo, Michigan 49007

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W.E. Upjohn Institute for Employment Research
300 S. Westnedge Avenue
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