

## Appendix I: Academic Articles Referenced

- Adjusted Graduation Gap: NCAA Division-I Men's and Women's Basketball. CSRI Report, 2010.
- Allen, B. H., & Peters, J.I. (1982). The influence of a winning basketball program upon undergraduate student enrollment decisions at DePaul University. In M.J. Etzel & J.F. Gaski (Eds.), *Applying marketing technology to spectator sports* (pp. 136-148). Notre Dame, IN: University of Notre Dame.
- Baade, R.A. and Sundberg, J.O. (1996). Fourth Down and Gold to Go? Assessing the Link between Athletics and Alumni Giving. *Social Science Quarterly*, 77(4), 789-803.
- Board of Trustees Letter (2008, March 14). Spokesman Review. Retrieved October 2, 2009 from [bit.ly/1HMhqXn](http://bit.ly/1HMhqXn)
- Board of Trustees Athletics Subcommittee. (2004). *Intercollegiate Athletics at Rice University*. Retrieved August 12, 2009 from [bit.ly/1Du53sJ](http://bit.ly/1Du53sJ)
- Borland, M.V., Goff, B.L., and Pulsinelli, R.W. (1992). College Athletics: Financial Burden or Boon? *Advances in the Economics of Sport*, 1, 215-235.
- Bowen, W. J., and Levin, S. A. (2003). *Reclaiming the Game*. Princeton, NJ: Princeton University Press.
- Bremmer, D.S. and Kesselring, R.G. (1993). The Advertising Effect of University Athletic Success: A Reappraisal of the Evidence. *The Quarterly Review of Economics and Finance*, 33(4), 409-421.
- Brown, R.W. (1994). Measuring cartel rents in the college basketball player recruitment market. *Applied Economics*, 26, 27-34.
- Brown, R.W. and Jewell, R.T. (2006). The Marginal Revenue Product of a Women's College Basketball Player. *Industrial Relations*, 45(1), 96-101.
- Case, B., Greer, S., & Brown, J. (1987). Academic clustering in athletics: Myth or reality? *Aren Review*, 11(2), pp. 48-56.
- Chressanthis, G. A., & Grimes, P. W. (1993). Intercollegiate sports success and first-year student enrollment demand. *Sociology of Sport Journal*, 10, 286-300.
- Chung, D. J. (2013). The Dynamic Advertising Effect of Collegiate Athletics. *Marketing Science*, 32(5), 679-698.
- Clotfelter, C.T. (2011). *Big-Time Sports in American Universities*. New York, NY: Cambridge University Press.
- Coalition on Intercollegiate Athletics. (2007, June 15). Framing the Future: Reforming Intercollegiate Athletics. Retrieved August 12, 2009 from [bit.ly/1bluXji](http://bit.ly/1bluXji)
- Frank, R.H. (May 2004). Challenging the Myth: A Review of the Links Among College Athletic Success, Student Quality, and Donations. *Knight Foundation Commission on Intercollegiate Athletics*. Retrieved August 12, 2009 from [kng.ht/1Hole0s](http://kng.ht/1Hole0s)
- Fountain, J. J., & Finley, P. S. (2009). Academic majors of upperclassmen football players in the Atlantic Coast Conference: An analysis of academic clustering comparing white and minority players. *Journal of Issues in Intercollegiate Athletics*, 2, 1-13.

Gladden, M., Mahony, D., and Apostopoulos, A. (2005). Toward a Better Understanding of College Athletic Donors: What are the Primary Motives? *Sport Marketing Quarterly*, 14, 18-30.

Gayles, J., and Hu, S. (2009). The Influence of Student Engagement and Sport Participation on College Outcomes. *The Journal of Higher Education*, 80(3), 315-333

Goff, B. (2000). Effects of university athletics on the university: A review and extension of empirical assessment. *Journal of Sport Management*, 14, 85-104.

Goff, B. (2004). Effects of University Athletics on the University: A Review and Extension of Empirical Assessment. In S.R. Rosner and K.L. Shropshire (Eds.), *The Business of Sports*, 540-550. Sudbury, MA: Jones and Bartlett.

Goidel, R.K. and Hamilton, J.M. (2006). Strengthening Higher Education Through Gridiron Success? Public Perceptions of the Impact of National Football Championships on Academic Quality. *Social Science Quarterly*, 87(4), 851-862.

Hoffer, A., Humphreys, B. R., Lacombe, D. J., & Ruseski, J. E. (2014). The NCAA Athletics Arms Race: Theory and Evidence. Working Paper, Department of Economics, West Virginia University.

Howell, J. and Rascher, D. (2011). An Analysis and Assessment of Intercollegiate Athletics at the University of San Francisco. University of San Francisco (Unpublished).

Humphreys, B.R. (2006). The Relationship Between Big-Time College Football and State Appropriations for Higher Education. *International Journal of Sport Finance*, 1, 119-128.

Humphreys, B.R. and Mondello, M. (2007). Intercollegiate Athletic Success and Donations at NCAA Division I Institutions. *Journal of Sport Management*, 21, 265-280.

Intercollegiate Athletics at Rice University (2004). Report by McKinsey.

Johnston, T.C. (2010). Who and What Influences Choice of University?: Student and University Perceptions. *American Journal of Business Education*, 3 (10), 15-23.

Koo, G.Y., & Dittmore, S.W. (2014). Effects of Intercollegiate Athletics on Private Giving in Higher Education. *Journal of Issues in Intercollegiate Athletics*, 7, 1-16.

Le Crom, C., Warren, B., Clark, H., Marolla, J., and Gerber, P. (2009). Factors contributing to student-athlete retention. *Journal of Issues in Intercollegiate Athletics*, 2(1), 14-24

Lieber, R. (2004, March 14). Score! Gonzaga University was struggling financially. Then it started winning basketball games. *Wall Street Journal*, Retrieved March 27, 2009 from [on.wsj.com/18iOZkH](http://on.wsj.com/18iOZkH)

Lieber Steeg, J., Upton, J, Bohn, P., & Berkowitz, S. (2008, November 19). College athlete's studies guided toward 'major in eligibility.' *USA Today*. Retrieved October 7, 2009 from [usat.ly/1yK748n](http://usat.ly/1yK748n)

Litan, R.E., Orszag, J.M., & Orszag, P.R. (2003). *The empirical effects of collegiate athletics: An interim report*. Sebago Associates.

Mahony, Gladden and Funk (2003). Examining Athletic Donors at NCAA Division I Institutions. *International Sports Journal*, 7(1). 9-27.

Mandel (2003, August 19). Power struggle: College football's stakes, climate provoke serious battle. *SI Vault*. Retrieved June 25, 2009 from [bit.ly/1GdhkZM](http://bit.ly/1GdhkZM)

McCormick, R.E., and Tinsley, M. (1990). Athletics and Academics: a Model of University Contributions. In *Sportometrics* (Edited by Goff, B.L., and Tollison, R.D.) 193-204. College Station, TX: Texas A&M University Press.

McEvoy, C. (2005). The relationship between dramatic changes in team performance and undergraduate admissions applications. *The SMART Journal*, 2(1), 17-24.

McEvoy, C. (2006). The Impact of Elite Individual Athletic Performance on University Applicants for Admission in NCAA Division I-A Football. *The Sport Journal*, 9(1). Retrieved, October 1, 2009 from [bit.ly/1E2FGmq](http://bit.ly/1E2FGmq)

Meer, J., and Rosen, H. (2009), The Impact of Athletic Performance on Alumni Giving. *Economics of Education Review*, 28(3), 287-294

Mixon, F.G. and Hsing, Yu. (1994). The Determinants of Out-of-State Enrollments in Higher Education: A Tobit Analysis. *Economics of Education Review*, 13(4), 329-335.

Mixon, F. G. and Ressler, R. W. (1995). An Empirical Note on the Impact of College Athletics on Tuition Revenues. *Applied Economics Letters*, 2, 383-387.

Mixon, F.G. and Trevino, L.J. (2005). From Kickoff to Commencement: The Positive Role of Intercollegiate Athletics In Higher Education. *Economics of Education Review*, 24, 97-102.

Mulholland, S.E., Tomic, A., & Sholander, S. (2014). The faculty Flutie factor: Does football performance affect a university's US News and World Report peer assessment score?. *Economics of Education Review*, 43, 79-90.

Murphy, R.G. and Trandel, G.A. (1994). The Relation Between a University's Football Record and the Size of Its Applicant Pool. *Economics of Educations Review*, 13(3), 265-270.

NCAA News Release (2006, January 16). Student-Athletes Outpace Student Body in Graduation. Retrieved October 3, 2009 from [on.ncaa.com/1GdhuAm](http://on.ncaa.com/1GdhuAm)

NCAA Eligibility Center 2009-10 Guide for the College-Bound Student-Athlete Where Academic and Athletics Success is Your Goal. Retrieved May 4, 2011 from [bit.ly/1H8TIFG](http://bit.ly/1H8TIFG)

Orszag, J., & Israel, M. (2009). The Empirical effects of collegiate athletics: An update based on 2004-2007 data. *Compass Lexicon for the NCAA*.

Orszag, J.M., & Orszag, P.R. (2005, April). The empirical effects of collegiate athletics: An update. *Compass Lexicon for the NCAA*.

Pope, D.G. and Pope, J.C. (2009). The Impact of College Sports Success on the Quantity and Quality of Student Applications. *Southern Economic Journal*, 75(3), 750-780.

Potuto, J., and O'Hanlon, J. (2006). National Study of Student-athletes Regarding Their Experiences as College Students. NCAA Research Report. Retrieved October 9, 2009 from [on.ncaa.com/1bdToHX](http://on.ncaa.com/1bdToHX)

Question and Answer with Father Spitzer (2009). Spokesman Review, March 9, 2009. Retrieved July 12, 2009 from [bit.ly/1HMhSEY](http://bit.ly/1HMhSEY)

Rhoads, T.A. and Gerking, S. (2000). Educational Contributions, Academic Quality, and Athletic Success. *Contemporary Economic Policy*, 18(2), 248-258.

Roy, D.P. and Graeff, T.R. (2008). Repositioning a University Through NCAA Division I-A Football Membership. *Journal of Sport Management*, 28, 11-29.

Sack, A. (2009). Clashing Models of Commercial Sport in Higher Education: Implications for Reform and Scholarly Research. *Journal of Issues in Intercollegiate Athletics*, 2, 76-92

Schwarz, A. (2011). Bad accounting drives bad decisions: the case of the University of Nebraska, Omaha dropping football. Unpublished document.

Seattle University (2007, April 23). Seattle University Athletic Alignment Study Task Force: Final Report to Stephen V/ Sunborg, SJ, President & The Executive Team of Seattle University. Unpublished Document: Seattle University.

Shulman, J. L., and Bowen, W. G. (2001). *The game of life: College sports and educational values*. Princeton, NJ: Princeton University Press.

Skousen, C.R., & Condie, F.A. (1988). Evaluating a sports program: Goalposts vs. test tubes. *Management Accounting*, 60, 43-49.

Smith, R. (2009). College Football and Student Quality: An Advertising Effect or Culture and Tradition? *The American Journal of Economics and Sociology*, 68(2), 553-579.

Stinson, J.L. and Howard, D.R. (2007). Athletic Success and Private Giving to Athletic and Academic Programs at NCAA Institutions. *Journal of Sport Management*, 21, 235-264.

Stinson, J. (2009). Athletic Giving and Academic Giving: Exploring the Value of SPLIT Donors. Unpublished manuscript.

Stinson, J. and Howard, D. (2004). Scoreboards vs. Mortarboards: Major Donor Behavior and Intercollegiate Athletics. *Sport Marketing Quarterly*, 13, 129-140.

Stinson, J. L., & Howard, D. R. (2007). Athletic success and private giving to athletic and academic programs at NCAA institutions. *Journal of Sport Management*, 21(2), 237-266.

Stinson, J. and Howard, D. (2008). Winning Does Matter: Patterns in Private Giving to Athletic and Academic Programs at NCAA Division I-AA and I-AAA Institutions. *Sport Management Review*, 11(1), 1-20.

Stinson, J.L., Marquardt, A., & Chandley, J. (2012). An Empirical Examination of University Intercollegiate Athletic Expenditures. *Sport Marketing Quarterly*, 21(2).

Storch, E., Storch, J., Killany, E., and Roberti, J. (2005). Self-Reported Psychopathology in Athletes: A Comparison of Intercollegiate Student-Athletes and Non-Athletes. *Journal of Sport Behavior*, 28(2), 86-99

Suggs, W. (2003). Jock majors: Many colleges allow football players to take the easy way out. *The Chronicle of Higher Education*, 49(17), 33.

University of San Francisco Board of Athletic Oversight. (2009, March 20). Presentation to the University of San Francisco Board of Trustees. Unpublished material.

Toma, J.D. and Cross, M.E. (1998). Intercollegiate Athletics and Student College Choice: Exploring the Impact of Championship Seasons on Undergraduate Applications. *Research in Higher Education*, 39(6), 633-661.

Tucker, I. B. (2004a). A reexamination of the effect of big-time football and basketball success on graduation rates and alumni giving rates. *Economics of Education Review*, 23(4), 655-661.

Tucker, I.B. (2005). Big-Time Pigskin Success: Is There an Advertising Effect? *Journal of Sports Economics*, 6, 222-229.

Tucker, I.B. and Amato, L.T. (2006). A Reinvestigation of the Relationship Between Big-Time Basketball Success and Average SAT Scores. *Journal of Sports Economics*, 7, 428-440.

Turner, S.E., Meserve, L.A. and Bowen, W.G. (2001). Winning and Giving: Football Results and Alumni Giving at Selective Private Colleges and Universities. *Social Science Quarterly*, 82(4), 812-826.

Weygandt, J.J., Kimmel, P.D., & Kieso, D.E. (2015). "Relevant Costing for Managerial Decisions." *Accounting Principles* (12<sup>th</sup> ed.). Wiley.

Wild, J. J., Chiappetta, B., & Shaw, K. W. (2013). "Incremental Analysis and Capital Budgeting." In *Financial and Managerial Accounting: Information for Decisions* (5<sup>th</sup> ed.). McGraw-Hill/Irwin.

## Appendix II: Assumptions

Issue	Assumption/Reason	Confidence	Impact if Incorrect	Page
Portion of UABEF donations to athletics driven by football vs. discretionary support	In the absence of a view behind UABEF's public documents, we assume \$620,000 of UABEF donations to football are not related to sponsoring football.	Moderate. Although approximately 75% of revenues into UABEF are themselves donations, 25% is parking revenue, nevertheless we understand little of the donated money is made with an eye to supporting football.	The range of correct adjustments ranges from \$0 (if all money is truly for football) to \$640,000 (if all money is truly discretionary). We're obviously on the very conservative end of this range and so the most like direction of any error is to understate football revenue.	31-32
Whether UABEF expenses transferred to athletics should be removed from pro forma	No. In the absence of evidence, most conservative to assume these are real, marginal expenses	Moderate. There is some suggestion that some of these "other expenses" are really ongoing departmental costs that would not change in the absence of football.	If assumption is wrong, football expenses have been overstated by up to \$275,000	31-32
Whether any donations classified as NABSOG are really football, bowling, rifle (FBR) donations not properly characterized	No. Our initial review of detail seemed to indicate these were more of a discretionary nature unrelated to FBR	Strong. Discussions were had with Athletic Department prior to project termination supporting the assumption	If assumption is wrong, FBR expenses have been overstated by up to \$60,000	32-33
Likelihood of UAB remaining in Conference-USA	Without football, UAB will have to find a new conference.	Strong. C-USA Constitution required football. Media reports suggest that while C-USA recognizes UAB needs time to make a decision, that if football is not restored, continued C-USA membership is unlikely.	Vital. Losing full C-USA membership is the largest driver of reduced revenues and increased expenses in this analysis. However, our revenue assumption will not be fundamentally off if UAB remains in C-USA but receives an unequal distribution.	36-39
Replacement Conference	If UAB leaves C-USA, we assume it will likely join the Missouri Valley or Ohio Valley conference (for their basketball programs) and find a lower-cost conference for other sports.	Moderate. The university administration has supposedly floated the MVC as a likely end point. Managing to join two new conferences may prove more difficult than just one.	Low. Our analysis of revenue effects will not change in a substantial way for any non-football conference. (But see Travel Expenses below)	37-38 68-70
Revenue Impact of UAB's chosen replacement conference	We use typical MVC non-tournament team to replace C-USA revenues	Moderate. The university administration has supposedly floated the MVC as a likely end point.	Low. Similar conferences will not be much different. In years with basketball success, revenues will be higher.	37-39
Whether athletes who attend elsewhere will have their "slots" filled by non-athletes who would otherwise not attend	We assume that given UAB's growth targets, the three sports in question are not displacing paying customers.	Strong – we understand UAB is not able to attract as many new freshman each year as it would like. This has been confirmed based on the UAB strategic plan. ( <a href="http://www.uab.edu/plan/academics/academic-initiatives">http://www.uab.edu/plan/academics/academic-initiatives</a> )	The analysis of UAB would be fundamentally different if the university were "full" (i.e., each athlete admitted displaces a paying non-athlete). We think this probability is low given UAB's public commitment to growth.	41-45 49

Issue	Assumption/ Reason	Confidence	Impact if Incorrect	Page
Whether Partial Scholarships focused on specific GIA categories or spread <i>pro rata</i> across all	We've assumed that a partial scholarship consists of an equal discount of all components of a GIA, rather than being focused on specific categories	Low. In our experience, schools actually focus partial scholarships on tuition/fees and continue to charge full-price for hard-cost components like room and board.	Low. Under the specific circumstances for UAB, (athlete displaces a non-athlete from capacity-constrained dorms but nothing else), impact of a shift in the categorization of what the GIA discount covers may be immaterial to the bottom line.	46
Summer Aid Portion of GIA	We've assumed that, to the extent there is summer aid provided, it is focused on tuition and room (which have low summer-time opportunity costs), and not more than \$200 of books or food.	Low. Summer board (and books over \$200) unlikely to move the needle much. However, this is a spot that is not the absolutely most conservative possible estimate.	Could decrease the revenue benefits of FBR by no more than 5 – 10%, and unlikely to be even that high.	46
The actual list prices of the subcomponents of a GIA.	We've backed into the tuition portion of a GIA by calculating a high-end assumption on room, board, and books. The result is that Tuition, with highest marginal profits, is assumed to be as low as possible.	Low. We end up with a tuition bill for the rifle team that is below the listed cost of in-state tuition, which is a sign we've almost certainly been too conservative.	Moderate: Every dollar of payments moved from low margin items like room (where b/c of opportunity costs, each dollar of spending is matched by a lost dollar) towards tuition (where the marginal profit is 100%) makes each GIA less expensive to UAB by lowering costs (opportunity or hard) without changing total revenue.	47-48
Whether Bowling Athletes would still attend UAB	We assume all bowling athletes would otherwise not attend UAB absent their sport.	Moderate. We base this assumption on discussions with the athletic department, but we would have liked to confirm via focus group.	To the extent this is incorrect, bowling revenues would need to be downwardly adjusted.	50
Whether Rifle Athletes would still attend UAB	We assume all rifle team members are recruited after arrival on campus. And thus are assumed to attend even without their sport.	Moderate. We base this assumption on discussions with the athletic department, but we would have liked to confirm via focus group.	To the extent this is incorrect, rifle revenues would need to be upwardly adjusted.	50
Whether Scholarship and Walk-on Football Athletes would still attend UAB	We assume football GIA athletes (and 10 of 30 walk-ons) would otherwise not attend UAB absent a football team. The rest (20 football walk-ons) are assumed to attend even without their sport.	High. The rate of transfers by football athletes (GIA and walk-on) supports the assumption that many of these athletes were drawn to UAB to play football.	To the extent this estimate is wrong, we believe it understates the number of walk-ons who would have attended elsewhere, and football revenue would be upwardly adjusted.	52-55
Whether any out-of-state walk-ons would go elsewhere without football	We assume 80% of relevant walk-ons are from in-state.	Moderate. Based on the walk-ons that have left UAB to play elsewhere, this is a solid, conservative estimate.	As we show in Appendix III, relaxing this assumption mildly increases the profitability of football	53-54

Issue	Assumption/ Reason	Confidence	Impact if Incorrect	Page
Housing Assumptions: Fall/Spring Capacity	Historically, UAB has been at capacity with respect to on-campus housing. This means each room occupied by an athlete lowers non-athlete revenue. We assume this will continue into the future, even though UAB will soon increase capacity by 33%. We thus assume there are no revenue benefits from housing partial GIA recipients and walk-ons in dorms, and that there are high opportunity costs to each athlete occupying a room.	Moderate (in long-run), Low in short-run.  We anticipate that as UAB grows, it will reach capacity on housing again. But in the short-run, we think it is likely that some slack capacity will exist, meaning that the opportunity costs of the room components of GIAs is substantially overstated.	If next year's housing slack is sufficient to absorb 109 GIA recipients (sharing 89.45 GIAs among them) then surplus has been understated by as much as \$550,000. (If the new dorms end up at less than full capacity in 2015-16, every empty room represent an overstatement of FBR expenses on the order of \$6,200 a bed).	56-57
Housing Assumptions: Summer Capacity	We assume that in summer there is (and will be) slack on-campus housing capacity.	Strong: Few schools fill up their housing in summer, and given the large increase in capacity, this seems quite unlikely for UAB going forward. We understand UAB even closes some dorms in summer from lack of demand.	To the extent housing is full in summer, the housing expense of the sports has been understated. Unlikely given UAB's facts.	56-57
Housing Assumptions: Price of Athletic Dorms	We also assume all athletes live in one of the most expensive dorms (Rast).	Strong: We understand the football team has strict rules that require most students to live in Rast Hall. We believe the same applies to the women's athletes as well	To the extent that athletes live in less expensive dorms, the surplus from these sports has been somewhat understated.	56-57
The precise commission UAB receives from Sodexo on the sale of a meal plan.	Based on evidence from prior litigation, we assume Sodexo pays UAB 15% of food plan revenues.	Moderate. Obviously this would be something a university official could resolve with real facts quite easily.	To the extent the commission is higher or lower, the estimated surplus will rise or fall.	58-59
The precise commission UAB receives from Barnes & Noble on the sale of items in UAB bookstore.	Based on similar contracts at other schools, we assume UAB receives a 20% discount and a 15% commission on all sales from Barnes and Noble. We assume the sale of sports-related merchandise accounted for under B&N deal and does not show up on the Athletic Department's books (and is not fully baked into UAB's IMG contract).	Moderate: Our examples from third party schools cover very different universities but have similar terms.	Low: Texas A&M receives between 13.8 and 15.8%, rather than 15%, depending on level of generated revenue. If UAB has a similar arrangement, the amount will fall within this tight range.	59-61
Whether COA stipends will cover all athletes or just counters	Based on likely Title IX obligations, we assume UAB will provide a <i>pro rata</i> (per equiv. %) COA Stipend to all athletes, not just counters.	Moderate: This appears to be the norm at FBS schools, based on media reports.	If UAB chose to limit COA payments to counter sports (or just full GIAs), the COA Stipend impact of bowling and rifle are slightly overstated.	61-62

Issue	Assumption/ Reason	Confidence	Impact if Incorrect	Page
Whether unlimited food is baked into COA estimates, and if not, whether the listed \$1,000 is subject to a Sodexo commission	We follow the most conservative assumption: that unlimited food is on top of COA stipends and UAB receives no commission on these purchases.	Low-to-Moderate: Carr provides two different assumptions as to whether COA and Unlimited Food overlap, but the version we've chosen follows Carr's numbers. We suspect if Sodexo provides the additional food, UAB could receive a discount equivalent to its typical 15%.	If this assumption is incorrect, the surplus from the three sports in question could be understated by as much as \$89,450.	61-62
Whether any of the Allocated Cost of Fringe Benefits are truly fixed.	We assume that \$100,000 of the three sports fringe benefits are allocated fixed costs that should not be considered savings	Strong: FICA payments for Bill Clark alone create a \$25,000 allocation of fixed costs. The likelihood of other elements of Clark's pay, or from other assistants, is high.	To the extent, this has been overstated, surplus could be overstated (but by no more than \$75,000).	64-66
What savings the Athletic Academic Center (or UAB Athletics as a whole) will experience by laying off football tutors (or other staff).	We have assumed that the three sports in question drive a <i>pro rata</i> share of tutoring expenses.	Strong: Based on our own knowledge of how athletes use academic support resources, and the likely fixed costs elements embedded in this budget, we feel a <i>pro rata</i> assumption is conservative but strong.	To the extent UAB is unable to lay off a <i>pro rata</i> share of staff, the surplus is understated. If more can be laid off, the savings from termination have been understated.	67
Likely increase in Team Travel if UAB leaves C-USA	We've assumed a 50% increase in just men's and women's basketball travel expenses and a 0% increase for all other non-cancelled sports.	Moderate: We base our assumption on a conservative downscaling of the WVU experience and a very conservative assumption that UAB will succeed with a two-conference strategy that minimizes new travel costs. In contrast, in 2008, UAB estimated these expenses at around of half our assumed value, but we think those costs are likely too low.	If UAB joins just one geographically more remote conference, the actual increase in travel expenses will be higher, and the estimated benefits of cancelling football will drop further.	67-69
Whether Fundraising/Marketing will change without football	Assumption: We've assumed \$125,000 (~20%) of this expense is driven by football.	Low: This estimate is not based on any firm data, but our early discussions with Athletic Department suggested this was a reasonable estimate.	The potential (unlikely) understatement of expenses is \$450,000, if all of these expenses were driven by football.	69
Likely ongoing Marching Band expenses	Based on public statements by the school and limited discussions with the athletic department, we assume ~75% of the marching band expenses are incorrectly treated as football expenses. We have adjusted for this. We further assume marching band will continue based on public statements by the university.	Strong: We strongly believe this treatment is consistent with UAB's stated plans for marching band.	To the extent marching band is scaled back or cancelled, on the surface this would decrease the estimated football surplus. However, further work would be needed to know whether marching band behaves like partial scholarship sports, potentially driving up revenues more than it costs.	70-71

Issue	Assumption/ Reason	Confidence	Impact if Incorrect	Page
Whether Marching Band itself creates off-the-books revenues	We currently assume that net band spending is unaffected by termination of the three sports. But if it is reduced, we would need to research whether Marching Band, like Women’s Bowling, attracts sufficient incremental revenue to pay for itself.	No Impact: Because of our assumption that marching band will continue as-is, this is an “off path” assumption. However, it would be useful to dig in on this in case the university does foresee making cuts to marching band.	No Impact, but we strongly suspect Marching Band also has “off-the-books” revenue benefits.	70-71
Whether any football cheerleaders would have chosen to go elsewhere in the absence of football.	We implicitly assume the answer to this question is no, by assuming no decline in football revenues due to forgone cheerleader tuition payments.	Moderate. We had hoped to study this question with our focus groups. We suspect that a few of the cheerleaders did make a college choice based on the opportunity for FBS football (excitement, TV exposure), but have no basis on which to quantify this effect.	Every lost full-price tuition check from an in-state cheerleader whose decision to attend UAB hinged on the ability to cheer is \$8,900. Forgone out-of-state payments are higher still: over \$20,000.	70-71
Whether Medical Expenses will change without football	We’ve assumed half of the school’s total listed medical expenses are driven by football. We also implicitly assume UAB does not have RPT issues that overstate costs stemming from use of its own hospital system.	Low: This estimate is not based on any firm data, but we think to the extent it is incorrect, it likely overstates the football expense.	To the extent this assumption is too high, the football surplus will be somewhat understated. To the extent UAB charges itself retail price for use of its medical facility, all of the same RPT issues will arise and need to be unpacked.	71
Whether future revenues and expenses are likely to substantially diverge, (outside of cost of scholarships)	Assumption: Like the Carr report, we assume that non-scholarship expenses will keep pace with non-CUSA-based revenues.	Moderate: While this is not based on specific data, historically NCAA revenues and expenses have risen in tandem (see the various NCAA studies by Orszag <i>et al.</i> ). Moreover, on this, we follow the UAB assumptions built into the Carr report.	To the extent non-scholarship expenses will grow substantially faster than revenues, then future surpluses will be lower than our base case. We see no evidence to suggest this is likely.	87
Whether UAB will be able quickly to resume its traditional level of guarantee game revenue.	Assumption: Implicitly, we assume that in the medium-term, UAB will be able to resume its position in the FBS pecking order that has allowed it to earn revenue from guarantee games.	Moderate: From our experience, new FBS entrants have not had trouble finding willing customers from the power conferences for pre-conference season games. One risk is if P5 schools begin focusing non-conference games on other P5 schools.	We think UAB will likely be able to reach levels similar to before the termination of football with a few years of cushion. We indicate (in our funding section) that the community could commit to cover these costs in the interim.	88-89

Issue	Assumption/ Reason	Confidence	Impact if Incorrect	Page
Whether UAB will be able to quickly replace lost on-field talent	We've also assumed that in the medium-term Coach Clark will be able to get UAB back to the level of talent and momentum he had achieved prior to the termination of football.	Moderate: Coach Clark had not been responsible for much of the recruited talent at UAB in 2014-15. This means that while the momentum has been stalled, it should only take a few years of recruiting for him to bring UAB back to where it was.	To the extent the team is unable to return to its 2014-15 level (6-6) and attendance drops back down to pre-Clark levels, our analysis will still be correct, because our base-case scenario uses the 2013-14 (2-10) season.	88-89
Whether an additional women's sport is needed for Title IX compliance if UAB keeps football and whether it would suffice to resume compliance	To the extent UAB is out of compliance currently, we assume that by adding one additional women's team, UAB will resume compliance under the second Title IX prong.	Strong: Our understanding is that adding opportunities for women by creating a new team may suffice to comply under this prong.	To the extent UAB has to meet strict proportionality requirement (the first prong), this may be difficult to do, but we would not understand UAB to be so required.	97-98
Whether a Women's Sport can be added profitably	We assume that an additional women's program can be added with a profile similar to women's bowling, such that the revenue benefits of the sport (additional NCAA payments, additional out-of-state tuition payments) more than offset the costs of running the team (coach and travel, etc.)	Strong: The evidence for bowling makes it quite likely this can be done. The primary impediment to such a course of action is the current belief that the accounting losses are real.	If this is incorrect, the cost of Title IX compliance will increase if football is restored. Rifle, as an example, has net costs around \$50,000	99-100
Whether UAB can focus its use of women's partial scholarships on out-of-state athletes, to increase the profitability of women's sports overall and to increase funds available for in-state female athletes.	We assume this is possible, but would require coaches to understand the benefits to UAB of such an approach and to buy in to a plan that stressed out-of-state athletes to improve overall women's scholarship funding.	Strong: The economic case for this approach is clear. Whether UAB can implement is a matter of policy and priority.	Our analysis is not directly affected by this issue, but we would recommend UAB consider this as a means to achieve improved compliance with Title IX financial proportionality whether it keeps football or not.	99-100

### Appendix III: Potential Impact of Less Conservative Assumptions

Throughout the body of the report, when confronted with uncertainty as to the correct value within an estimated range, our tendency was to choose the most conservative estimate, recognizing that would tend to understate the financial benefits of the three sports in question. Here we make reasonable assumptions at the other end of the range, to provide a sense of the upside potential for revenue generation. First we present the University-wide view of how much more money the cancellation of the programs will cost than envisioned (but from a less conservative position). We follow that up with a more detailed table and an explanation of each changed assumption.

**Table 22 (Revised): Estimated Benefits (Costs) of Cancelling Football, Bowling, and Rifle based on Less Conservative Assumptions**

<u>Adjustment</u>	<u>Football</u>	<u>Bowling</u>	<u>Rifle</u>	<u>TOTAL</u>
Regained Discretionary Funds	\$345,000	\$0	\$0	\$345,000
Loss of NCAA/C-USA Distribution	(\$2,723,844)	(\$47,773)	(\$55,738)	(\$2,827,355)
Adjustment for Merchandise Royalties	(\$28,000)	\$0	\$0	(\$28,000)
Loss of Revenue Offsets	(\$1,800,244)	(\$202,546)	(\$11,586)	(\$2,014,376)
Loss Coverage of Fixed Costs	(\$100,000)	\$0	\$0	(\$100,000)
Adjustment for Tutoring	\$225,000	\$0	\$0	\$225,000
Increase in Cost of Non-football Travel	(\$1,135,000)	\$0	\$0	(\$1,135,000)
Reduced Expenses from Marketing	\$125,000	\$0	\$0	\$125,000
Ongoing Cost of Marching Band	(\$250,000)	\$0	\$0	(\$250,000)
Reduced Expenses from Medical	\$300,000	\$0	\$0	\$300,000
Coaching Transition Amortization	(\$133,000)	\$0	\$0	(\$133,000)
<b>Net Losses to UAB outside of Athletics</b>	<b>(\$5,175,088)</b>	<b>(\$250,319)</b>	<b>(\$67,324)</b>	<b>(\$5,492,731)</b>

As can be seen, what we conservatively estimated as a \$3.7 million understatement of the 2013-14 benefits to the university now grows to a \$5.5 million understatement of the net cost of cancelling the sports under less conservative assumptions. The increase in the cost of termination is driven by the following five categories.

[A] **Adjustment for UABEF (Donations and Other Expenses).** As discussed above at pages 31-33, we see certain expenses assigned to the football program from the UABEF, which we've assumed in our primary analysis are true expenses. However, it is possible these represent the accounting for departmental expenses (like software) that were simply allocated to football and would not decrease in the absence of that sport. In this upside analysis, we assume those expenses are not true football outlays and so we add them back in.

[B] **Adjustment for Higher C-USA impact.** As discussed at pages 36-39, when assessing the impact of lost Conference USA revenue, we assumed the low end of the level of reduced conference distributions. Here we assume the higher end of the range.

[C] **Adjustment for less conservative GIA offsets.** Across pages 49-64, we often made conservative assumptions in determining the revenue offsets to listed GIA prices. Here we increase the level of offset by making the following changes: We now assume 15 walk-ons (50%) would change schools if football is not offered, rather than 10 (33%); we also assume 5 of these walk-on pay the higher level of tuition we see for scholarship football athletes while 10 pay the in-state minimum. The latter assumption is essentially the same 1/3 – 2/3 split as we see with the actual walk-ons who left UAB for other programs. And we assume a lower list price of athletic dorms, using Camp Hall instead of Rast.

[D] **Adjustment for reduced tutoring savings.** At page 69, we assumed a pro rata reduction in tutoring expenses from reducing the number of athletes. Here we assume that \$100,000 of those expenses are in fact fixed and will not be reduced. (If the assumed number of layoffs is five, this brings the per-FTE saving down to \$45,000).

[E] **Adjustment for more aggressive travel estimate.** At pages 67-69, we estimated the increase in non-football travel expenses if UAB joins the Missouri Valley Conference by first estimating the percentage increase in West Virginia's non-football travel expenses after joining the Big 12, and then using a moderated version of that figure. Furthermore, we applied that increase only to men's and women's basketball, rather than to the entirety of the sports that UAB envisions for 2015 and beyond. Here we assume an identical percentage increase as West Virginia and apply it to all sports that will remain after the termination of the three sports.

[F] **Adjustment to net out food against COA.** As discussed at page 61-62, the UAB information which we rely on to estimate the likely cost of the new COA stipends and unlimited food allowances (i.e., the Carr Report) provides contradictory statements about whether the COA stipend will be reduced because of the food allowance. In the body of the report, we take the most conservative approach, assuming that the costs do not offset at all. Here we assume they fully offset.

As can be seen in the table below, the potential upside from using less conservative assumptions is quite large. Our previously estimated *pro forma* profit of \$435,000 grows to over \$2 million.

**Table 23 (Revised): Upside of Economic Benefit/Cost of Football, Bowling, and Rifle**

University of Alabama at Birmingham	Pages	Football	Bowling	Rifle	TOTAL
Unadjusted Revenue Categories <sup>1,4</sup>		\$ 2,929,777	\$ -	\$ -	\$ 2,929,777
Student Fees, Direct & Indirect Facilities/Support	28-29	MOVED TO EXCESS/DEFICIT CALC.			
Contributions		\$ 1,477,123	\$ 2,520	\$ 2,279	\$ 1,481,922
Adjustment for Discretionary Funds	31-33	\$ (620,000)	\$ -	\$ -	\$ (620,000)
Upside Adjustment for In-Kind Expenses	[A]	\$ 275,000			\$ 275,000
NCAA/Conference Distributions		\$ 919,724	\$ -	\$ -	\$ 919,724
Adjustments for Loss of NCAA Distribution	33-36	\$ 523,844	\$ 47,773	\$ 55,738	\$ 627,355
Adjustment for loss of C-USA Distributions	36-39	\$ 1,700,000	\$ -	\$ -	\$ 1,700,000
Upside Adjustment for Higher C-USA impact	[B]	\$ 500,000			\$ 500,000
Royalties, Licensing, Advertisement and Sponsorship.		\$ 257,600	\$ -	\$ -	\$ 257,600
Adjustment for merchandise royalties	40	\$ 28,000	\$ -	\$ -	\$ 28,000
Total Operating Revenue		\$ 7,991,068	\$ 50,293	\$ 58,017	\$ 8,099,378
Unadjusted Expense Categories <sup>2,4</sup>		\$ 1,208,069	\$ 19,482	\$ 1,279	\$ 1,228,830
Athletic Student Aid.		\$ 2,650,160	\$ 97,348	\$ 76,011	\$ 2,823,519
Adjustment for GIA revenue offsets	49-64	\$ (1,665,303)	\$ (196,146)	\$ (8,530)	\$ (1,869,979)
Adjustment for less conservative GIA offsets	[C]	\$ (134,941)	\$ (6,400)	\$ (3,056)	\$ (144,397)
Coaching Salaries, Benefits, and Bonuses		\$ 2,382,378	\$ 57,386	\$ 8,999	\$ 2,448,763
Adjustment for Allocated Perks	64-66	\$ (100,000)	\$ -	\$ -	\$ (100,000)
Support Staff/Administrative Salaries, Benefits		\$ 409,845	\$ -	\$ 1,028	\$ 410,873
Adjustment for Tutoring	67	\$ 325,000	\$ -	\$ -	\$ 325,000
Adjustment for reduced tutoring savings	[D]	\$ (100,000)	\$ -	\$ -	\$ (100,000)
Team Travel		\$ 723,656	\$ 34,382	\$ 15,630	\$ 773,668
Adjustment for Increased non-football travel	67-69	\$ (320,000)	\$ -	\$ -	\$ (320,000)
Adjustment for more aggressive travel estimate	[E]	\$ (815,000)	\$ -	\$ -	\$ (815,000)
Fund Raising, Marketing and Promotion.		\$ 21	\$ -	\$ -	\$ 21
Adjustment for Football Expenses	69	\$ 125,000	\$ -	\$ -	\$ 125,000
Spirit Groups		\$ 481,789	\$ -	\$ -	\$ 481,789
Adjustment For Marching Band	70-71	\$ (250,000)	\$ -	\$ -	\$ (250,000)
Indirect Facilities and Administrative Support	28-29	MOVED TO EXCESS/DEFICIT CALC.			
Adjustment for Football Medical	71	\$ 300,000	\$ -	\$ -	\$ 300,000
Other Operating Expenses		\$ 1,100,161	\$ 1,349	\$ 1,585	\$ 1,103,095
Adjustment <sup>3</sup> to Amortize Coaching Transition	40	\$ (133,000)	\$ -	\$ -	\$ (133,000)
Total Operating Expenses.		\$ 6,187,835	\$ 7,401	\$ 92,946	\$ 6,288,182
<b>Net</b>		<b>\$ 1,803,233</b>	<b>\$ 42,892</b>	<b>\$ (34,929)</b>	<b>\$ 1,811,196</b>
Estimated 2014-15 ticket sale growth	30	\$ 148,199	\$ -	\$ -	\$ 148,199
Adjustment for incremental CFP Revenue	39	\$ 890,000	\$ -	\$ -	\$ 890,000
Adjustment to Add COA Stipends/Food	61-62	\$ (535,717)	\$ (15,912)	\$ (24,608)	\$ (576,237)
Adjustment to net out food against COA	[F]	\$ (83,160)	\$ (2,470)	\$ (3,820)	\$ (89,450)
<b>Pro Forma Net</b>		<b>\$2,222,555</b>	<b>\$ 24,511</b>	<b>\$ (63,357)</b>	<b>\$ 2,183,708</b>

<sup>1</sup>Ticket Sales, Guarantees, Endowment and Investment Income, Other Operating Revenue (excl. Coach Transition)

<sup>2</sup>Guarantees, Severance, Recruiting, Equipment, Game Expenses, Direct Facilities, Maintenance, and Rental, Memberships and Dues.

<sup>3</sup>Other OpEx. Adjustment includes the net adjustment to both Op. Rev. and Op. Ex for Coach Transition

<sup>4</sup>Unadjusted figures taken from the UAB 2013-14 AUP report, received from public/media sources. See Appendix V for original data

## Appendix IV: Unadjusted UAB accounting data

**Table 24: Source Data per UAB's 2013-14 AUP report**

University of Alabama at Birmingham	Football	Bowling	Rifle	TOTAL
Ticket Sales	\$ 471,801	\$ -	\$ -	\$ 471,801
Student Fees	\$ -	\$ -	\$ -	\$ -
Guarantees.	\$ 1,700,000	\$ -	\$ -	\$ 1,700,000
Contributions.	\$ 1,477,123	\$ 2,520	\$ 2,279	\$ 1,481,922
Direct Institutional Support	\$ 3,439,077	\$ 208,427	\$ 103,253	\$ 3,750,757
Indirect Facilities and Administrative Support	\$ 21,885			\$ 21,885
NCAA/Conference Distributions	\$ 919,724	\$ -	\$ -	\$ 919,724
Royalties, Licensing, Advertisement and Sponsorship	\$ 257,600	\$ -	\$ -	\$ 257,600
Endowment and Investment Income	\$ 3,038	\$ -	\$ -	\$ 3,038
Other Operating Revenue	\$ 754,938	\$ -	\$ -	\$ 754,938
Total Operating Revenue	\$ 9,045,186	\$ 210,947	\$ 105,532	\$ 9,361,665
Athletic Student Aid.	\$ 2,650,160	\$ 97,348	\$ 76,011	\$ 2,823,519
Guarantees	\$ 304,364	\$ -	\$ -	\$ 304,364
Coaching Salaries, Benefits, and Bonuses	\$ 2,382,378	\$ 57,386	\$ 8,999	\$ 2,448,763
Support Staff/Administrative Salaries, Benefits	\$ 409,845	\$ -	\$ 1,028	\$ 410,873
Severance Payments	\$ 146,225			\$ 146,225
Recruiting	\$ 164,268	\$ 9,057	\$ -	\$ 173,325
Team Travel	\$ 723,656	\$ 34,382	\$ 15,630	\$ 773,668
Equipment, Uniforms and Supplies	\$ 418,285	\$ 7,232	\$ 1,279	\$ 426,796
Game Expenses	\$ 84,445	\$ -	\$ -	\$ 84,445
Fund Raising, Marketing and Promotion	\$ 21	\$ -	\$ -	\$ 21
Direct Facilities, Maintenance, and Rental	\$ 87,714	\$ 2,668	\$ -	\$ 90,382
Spirit Groups	\$ 481,789	\$ -	\$ -	\$ 481,789
Indirect Facilities and Administrative Support	\$ 21,885	\$ -	\$ -	\$ 21,885
Medical Expenses and Medical Insurance	\$ -	\$ -	\$ -	\$ -
Memberships and Dues	\$ 2,768	\$ 525	\$ -	\$ 3,293
Other Operating Expenses	\$ 1,100,161	\$ 1,349	\$ 1,585	\$ 1,103,095
Total Operating Expenses	\$ 8,977,964	\$ 209,947	\$ 104,532	\$ 9,292,443

*Note: Categories with zeroes for all three sports (without further adjustments made in report) have been omitted.*

## Appendix V: Funding, Acknowledgements, and Relevant Past Work

### Funding

The authors and several partner firms replied to a request for proposal from the UAB Athletic Task Force. The RFP called for a written report that would be publicly distributed. In early March 2015, our proposal was accepted in writing and we began work under direct written instructions from the Task Force. After 28% of the allotted time for the project had been completed (consisting most of planning and preliminary discussions with UAB athletics), the project was cancelled. The authors' firm, and the proposed partner firms, were then promised in writing a *pro rata* payment of \$22,400 in funding for this project. Although as of this writing, that payment has not been received (and is now past-due), once payment is made both authors will receive a portion of that payment.

The authors then worked for approximately one month performing much of the planned analysis (where possible) through public data. The conservatively estimated value of this donated time is approximately \$40,000 at our customary rates. Thereafter, the authors were contacted by generous donors from the UAB Football booster community, who wish to remain anonymous, who provided an additional \$20,000 in funding to ensure the authors could complete this report in a timely fashion. No conditions were placed on our work from these donors other than a commitment to work diligently to get the results out to the public expeditiously. We greatly thank these donors for making it possible to finish this report in a timely fashion, and for allowing us the full professional freedom to state our economic views without interference.

One brief mention of the term “bias” must be broached. A UAB official has publicly claimed that one of the author’s preliminary analysis of UAB did not “meet the critical threshold for many of providing a fresh, new, unbiased analysis.” He further stated that as a result, “To many, it is clear that OSKR formed their opinion on this issue long ago... Any report they issue cannot be considered unbiased.”<sup>159</sup> It is true that Andy Schwarz had begun to analyze UAB’s finances prior to being engaged to work on the project, because he hopes to use the analysis as part of his eventual doctoral dissertation. Rather than bringing a pre-conceived bias, the authors believe this brings expertise to the question. The preliminary conclusion reached by Schwarz in his “Screw the Math”<sup>160</sup> piece in December has been borne out by our richer data analysis here. We stand behind our numerical work as honest, sincere, conservative, and certainly not biased in favor of maintaining the football, bowling, and/or rifle programs. It’s just that the unbiased numbers happen to support that outcome.

---

<sup>159</sup> Given the news which has since come out on the timing of the decision, there is some irony in the claim that the bias lay with OSKR.

<sup>160</sup> The article appears at <https://sports.vice.com/article/screw-the-math-uab-can-afford-football-so-why-is-it-choosing-otherwise>. It appears to have been lost on some, but the word “screw” was not an appeal to ignore the numbers (as should have been clear from the fact that the article is almost entirely an exercise in arithmetic).

## Acknowledgements

First and foremost, we must credit our partners in the original conception for this report, Joe Orlando of Frank, Rimerman + Co. and his capable staff, as well as Sonia Misak and Heather Poli of The Global Citizens, who worked under very tight time constraints to provide us with excellent plans of action for our larger study, even if the shortness of the original project meant that those plans remain unexecuted. Joe also continued to work with us, even after we had lost funding, and ultimately agreed to prepare Appendix VII, in which he assesses our work from his USPAP framework. While the report presented here is solely the responsibility of the authors, Rascher and Schwarz, nevertheless our project partners' contributions were invaluable in helping shape the direction we planned to follow, and for informing our recommendations for follow up work.

We would also like to thank Professor Jeremy Howell of the University of San Francisco, whose work with Dan Rascher on a similar study of USF made it possible to complete this report in the very tight timeframe requested and on a much-reduced budget. All new research builds on the contributions of past researchers, but this report owes Professor Howell a particularly strong debt.

We would also like to thank Colin Weaver and Giseob Hyun of OSKR for the numerous hours they put into assisting us in developing the review of literature, collating data, and auditing our work. OSKR is a small organization and we rely on staff to make our work great.

We also thank two Michigan undergrads: Shayna Lonnille Brown of the Penny W. Stamps School of Art & Design and Tristan Blackmore of the A. Alfred Taubman College of Architecture and Urban Planning for a major upgrade to our figures and charts. Go Blue!

Finally, we would like to thank the UAB Athletics Assessment Task Force for having the confidence in us to select us unanimously for the original project and to fuel our interest in these questions. When our project was cancelled, we had just begun research with real freedom to develop and design the studies we thought necessary, and we anticipated being granted full access to review necessary documents and to interview key staff. As originally designed, this work was intended to include in-depth interviews with multiple UAB employees and stakeholders and review of proprietary data. Given the timing, we never received anything beyond the public level of data, but the spirit of transparency espoused during our week of involvement was encouraging.

When we were originally hired by UAB, we committed to a full, public disclosure of our analysis and our results. With this report we have now done so. Regardless of the ultimate decisions UAB makes, it is always our goal to provide rigorous and unbiased analyses to help in client decisions. We think this report does that as well, and we hope it assists the community in assessing the economic choices involved in deciding whether to exit FBS (sponsoring football is a requirement for FBS membership) as well as whether to discontinue the bowling and rifle programs. While this report is necessarily preliminary based on limited public data, we have made an effort wherever possible to point out the assumptions that we have made to overcome the absence of better data, and have indicated follow up research projects to replace our assumptions with empirical evidence.

## Relevant College Sports Work and Research Performed by Rascher and Schwarz

- Consulting on economic and financial issues related to the **University of Maryland's** exit fee from exiting the **ACC**, based on competitive benchmarking.
- Assessment of Intercollegiate Athletics at the **University of San Francisco**.
- Marketing research utilizing surveys and analysis pertaining to customer assessment for **U.C. Berkeley Athletics** and the intercollegiate football program.
- Testimony on College Sports Economics to the *Committee on Education and the Work Force, United States House of Representatives*, 2014.
- Multiple reports, depositions, and federal trial testimony on economic analysis issues regarding class certification, antitrust, and licensing in *O'Bannon et al. v. NCAA et al.*, *focused in part on proper interpretation of college sports accounting*.
- Economic and Fiscal impact study of the **2015 Valero Alamo Bowl** college football game on the City of San Antonio and State of Texas.
- Economic and Fiscal impact study of the **2014 AdvoCare V100 Texas Bowl** college football game on the City of San Antonio and State of Texas.
- Economic and Fiscal impact analysis of the **2014 Southwestern Athletic Conference (SWAC)** football championship on the State of Texas.
- Economic and Fiscal impact measurement of the **2014 AdvoCare Texas Kickoff** college football game between LSU and the University of Wisconsin on the City of Houston.
- "The Demand for College Football Bowl Games," with Terence Eddy, 2014.
- Expert report on economic analysis issues regarding class certification in *Rock v. NCAA*.
- Expert witness work on class certification/damages/settlement in *Keller et al. v. NCAA et al.*
- Economic and Fiscal impact forecast of the **2014 AdvoCare Texas Kickoff** college football game between LSU and the University of Wisconsin on the City of Houston.
- Economic and Fiscal impact study of the **2013 Valero Alamo Bowl** college football game on the City of San Antonio and State of Texas.
- Economic and Fiscal impact study of the **2013 SWAC Championship** college football game on the region and the State of Texas.
- Economic and Fiscal impact forecast of the **2012 West Coast Conference Men's Basketball Tournament** on the City of Las Vegas, and assessment of other markets for future events.
- Economic and Fiscal impact study of the **2012 Valero Alamo Bowl** college football game on the City of San Antonio and State of Texas.
- "The Impact on Demand from Winning in College Football and Basketball: Are College Athletes More Valuable than Professional Athletes?" with Chad McEvoy. In *Selected Proceedings of the Santa Clara University Sports Law Symposium*, September 2012.
- Economic and Fiscal impact study of the **2011 Meineke Car Care Bowl** college football game on the City of Houston.
- Economic and Fiscal impact study of the **2011 Valero Alamo Bowl** college football game on the City of San Antonio and State of Texas.
- Panelist on *Congressional Panel on American Collegiate Student Athletics, United States House of Representatives*, 2011.
- **ESPN Outside the Lines**: "Wrestling with the Truth in Nebraska" – analysis of Nebraska-Omaha's wrestling and football profitability, with ESPN investigative reporter Paula Lavigne.

- Lead Economic Drafters of **Letter to DOJ on competitive benefits of a College Football Playoff** vis-à-vis BCS system.
- Economic and Fiscal impact study of the 2009 NCAA college football game between **University of Notre Dame and Washington State University** on the City of San Antonio.
- Economic and Fiscal impact study of the **2008 NCAA Men's Final Four** on the State of Texas for the San Antonio Sports Foundation and the State Comptroller's Office.
- Economic and Fiscal impact study of the **2007 Valero Alamo Bowl** college football game on the City of San Antonio.
- Economic and Fiscal impact study of the **2007 Dr. Pepper Big 12 Championship** college football game on the State of Texas.
- Economic and Fiscal impact study of the **2007 NCAA Men's Basketball Regional Finals** on the City of San Jose.
- Support to Counsel for Plaintiffs in *White v. NCAA*, focused primarily on the successful pursuit of class certification, as well as evaluation of settlement options during court-imposed mediation.
- Economic and Fiscal impact study of the **2005 NCAA Division I Women's Volleyball Championship** on San Antonio.
- Economic and Fiscal impact study of the **2004 Alamo Bowl** on the City of San Antonio.
- Economic and Fiscal impact study of the **2004 NCAA Men's Final Four** on the State of Texas.
- Fiscal/Tax Impact Forecast of the **2004 NCAA Men's Final Four** on the State of Texas.
- Testimony to **California State Senate** (2003) regarding the economics of college athletics.
- Assisted on Economic and Fiscal impact study of the **1999 NCAA Women's Final Four** in San Jose for SJSU and the NCAA.
- Economic and Fiscal impact study of the **1998 NCAA Men's Final Four** on the City of San Antonio.

## **Appendix VI: Future Research Proposals**

In addition to the discrete future research projects discussed above – such as working with UAB personnel to understand better the financial arrangements between the University and the bookstore to calculate the unlisted financial benefit from football built into the bookstore accounting – there are entire projects we envisioned when this project was fully funded, which have had to be put to the side for lack of time and funding, or in some cases lack of access to internal UAB information. We list these here as future projects, both in hopes of finding the time and funding to do them ourselves, but also as a courtesy to other analysts evaluating the decision. In our view, a fully informed decision whether to cut or restore the sports in question can't be made without the understanding the following projects can provide.

### **Future Project – Longitudinal Study of UAB Athletics and Donor/Applicant History**

As part of the original project, we proposed to examine how Athletics success (measured in terms of winning, attendance, and revenues) impacts general university donations, donations to Athletics, and the number and quality of student applications, enrollment, and retention. This analysis was not undertaken because it cannot be done without cooperation from the University.

The next step would be more detailed analysis to determine the size of the impact. In other institutions, the literature has found that success which is not dramatic (e.g., making the Sweet 16 of the NCAA Men's Basketball Tournament) has small, but positive impacts on donations.

This project requires access to UAB, as well as an estimate of the donation that were allegedly offered, but declined, as the University took steps to wind down the program prior to December 2014.

### **Future Project – Benchmarking against other C-USA institutions**

Our understanding is that this project is still something the university's Athletic Task Force plans to undertake. To the extent this does not happen and the community feels this project is necessary, it is a simple matter of acquiring data from Conference USA and performing straightforward calculations. In the absence of access to C-USA data, we have not undertaken this project, though we have done some limited benchmarking with respect to debt levels and debt service.

## Future Project – Focus Groups addressing “Future Research Project” questions above

In the Appendix that follows, we present a fully formed research proposal that was on the cusp of initiation when the UAB-sponsored project was terminated, to be run by our partner firm, The Global Citizen. We would strongly suggest that any decision regarding the economic pros and cons of football find a way to address these critical questions. Our work here has replaced the answers this research would provide with assumptions. To our understanding, others who have looked at the UAB situation in the past have (by omission) assumed these effects are nil. The best way to make an accurate assessment of the importance and qualitative direction of these effects is first to undertake focus groups, such as the plan outlined below, and then to follow up with methodologically sound quantitative analysis to capture the size of these impacts and include them in any go/no-go decision. Without doing so, the analysis rests on assumptions, explicit (in our case) or implicit, and the quality of the analysis then depends in part on the soundness of those assumptions, rather than on data-driven research.

\*\*\*\*\*

### Proposal from The Global Citizens



**JOB NAME:** University of Alabama at Birmingham Football Program Qualitative Research (internal reference #029)

**ENGAGEMENT:** Qualitative research to support the OSKR comprehensive, professional feasibility study of football, rifle and bowling at UAB (specifically to help answer some of the trickier strategic questions about potential ancillary impacts of athletics)

#### **SCOPE:**

Discussion groups across different audiences

For some, we will use an independent recruiter:

1. **Students Highly Engaged in Football:** Discussion group of current students who held season tickets for Football
  - (90 minutes in length, recruit 6 to seat 4-6), aim for at least one out of state student, mix of male and female, freshmen and sophomores
2. **Students Moderately Engaged in Football:** Discussion group of students who are less engaged in Football (definition of level of engagement TBD dependent on UAB info)
  - (90 minutes in length, recruit 6 to seat 4-6), aim for at least one out of state student, we may do male only for these groups, freshmen and sophomores
3. **Current High School Seniors:** Discussion group with teens who have applied to Southern Schools for entry Fall/ Winter 2015 - 16 they should be in the middle of their decision process so we can understand the role of sports (we should decide together how interested in football we want them to be, we can recruit for this with an attitudinal screen, e.g. ‘it plays some part in my decision’)

- (90 minutes in length, recruit 8 to seat 6), recruit from zip codes that heavily feed into UAB (dependent on UAB info)

For the remaining groups, we will need the school's assistance in recruiting and also in providing a space for the discussion:

1. **Women's Bowling and Rifle Participants:** Discussion group of students who participated in the Rifle or Bowling programs in the past year
  - (90 minutes in length, recruit 6 to seat 4-6), 3 Bowling and 3 Rifle participants, aim for at least one out of state student, all with some level of scholarship, all female, TBD whether they need to be freshmen and sophomores (or whether we want a senior perspective too)
2. **Marching Band and Cheerleaders:** Discussion group of students who participated in Marching Band or Cheerleader programs in the past year
  - (90 minutes in length, recruit 6 to seat 4-6), 3 Marching Band and 3 Cheerleader participants, aim for at least one out of state student, mix of male and female
3. **Former Walk-on Football Players:** Discussion groups with students who walked-on to the football team last year
  - (60 minutes, recruit 6 to seat 4-6), all male, TBD whether they need to be freshman and sophomores (or whether we want a senior perspective too)

### **Donor Interviews**

We also hope to interview several donors (in person or by phone). We would like the Task Force and/or University to provide us with access to major donors

- The 5 largest athletics donors, (including FB and non-FB if appropriate).
- One or two large non-athletics donors.
- Some number of more moderate athletics donors.

### **DELIVERABLES**

We will deliver a topline report of the research, to be delivered as soon as possible within the week of fieldwork ending.

### **TIMING**

We will aim to conduct the research over March 24th-26th, assuming these dates work for the school and that we have ample recruitment time (we need to brief our independent recruiters Monday March 16th and need UAB info prior to this).

### **FINE PRINT**

Costs above include participation of 1-2 Global Citizens consultants, design of screener, recruitment, facility costs, discussion guide, moderation and analysis, audio recording (dependent on the set up we may also do stationary video)

Costs above do not include travel, production of stimulus, any additional shipping costs, or transcripts

Unless otherwise requested, all copies of the audio and video recordings made during the research will be turned over to you by the completion of the project.

**POSTPONEMENT & CANCELLATION:**

Once a Job Confirmation is signed, we put wheels in motion within our team, facilities and recruiters, and we normally start incurring costs immediately, including:

**PROJECT COSTS:**

- Team setup time – developing screeners, field schedules, attending briefings and meetings
- Travel & related fees

**Fixed costs:**

- Recruiting fees (and potentially incentives)
- FocusVision or digital platform costs

**CANCELLATION COSTS:**

Days prior to fieldwork  
14 or more

- 100% of setup costs + any fixed costs incurred 7 – 13
  - 100% of setup costs + any fixed costs incurred + 50% consultant field time
- 6 or less
- 100% of setup costs + any fixed costs incurred + 100% consultant field time

The closer we get to fieldwork dates, the more costs we will incur. If the facility cannot rebook the rooms we've hired, we are responsible for the room rental costs.

Because recruiters have put in the work finding participants, we are responsible for all recruitment to date, and in some cases, partial incentives. If we've pre-tasked with homework, we will offer participants a nominal honorarium.

**POSTPONEMENT COSTS:**

If a project must be postponed for several weeks (due to stimulus availability or similar issues), we would incur charges as above (including contacting and rescheduling participants who are already recruited), but facility and travel fees would be re-applied to the new dates. If, however, the markets change, cancellation costs would apply

**Contact:**

Sonia Misak, Partner  
The Global Citizens  
(Sonia@globalcitizensinsight.com)  
Date: 3.12.15

## **Appendix VII – A Fundamental Valuation Perspective by Joe Orlando**

### **Introduction**

As outlined in the CV below, my name is Joe Orlando and I currently manage the business valuation practice at Frank, Rimerman + Co. LLP, a large, regional accounting firm in Northern California. As such, I am the final review and sign all of our group's opinions of value, primarily for financial reporting and tax purposes. I am an Accredited Senior Appraiser (ASA) and consider myself a valuation expert. I am not a CPA. However, as a representative of an accounting firm, all of our opinions confirm to the compliance set out by the American Institute of CPAs ("AICPA") and the Uniform Standards of Professional Appraisal Practice ("USPAP"). Additionally, in the review of other people's work, I also comply with USPAP standards on appraisal review ("Standard 3" of USPAP) and the Business Appraisal, Development standards ("Standard 9"). It is by these standards that I have reviewed the above analysis and by which I offer my fundamental valuation perspective.

However, before I offer a perspective, I need to add some context to the process by which it is made. Specifically, I need to outline the standards by which I am required to both complete (USPAP Standard 9) and review (USPAP Standard 3) analysis and reports.

### **USPAP Standard 3: Appraisal Review, Development and Reporting**

Standard 3 of USPAP outlines what is involved in an appraisal review assignment. While my work in reviewing the analysis above is not defined specifically as such, I followed the standards set out by USPAP in reviewing this work. While the bulk of this standard outlines the form by which a formal review report should follow, Standards Rule 3-2 and Rule 3-3 provide me with the basis for my perspective of this analysis, specifically;

#### **Standards Rule 3-2**

In developing an appraisal review, the reviewer must:

- (a) identify the client and other intended users;
- (b) identify the intended use of the reviewer's opinions and conclusions;
- (c) identify the purpose of the appraisal review, including whether the assignment includes the development of the reviewer's own opinion of value or review opinion related to the work under review;
- (d) identify the work under review and the characteristics of that work which are relevant to the intended use and purpose of the appraisal review, including:
  - (i) any ownership interest in the property that is the subject of the work under review;
  - (ii) the date of the work under review and the effective date of the opinions or conclusions in the work under review;
  - (iii) the appraiser(s) who completed the work under review, unless the identity is withheld by the client; and

- (iv) the physical, legal, and economic characteristics of the property, properties, property type(s), or market area in the work under review.
- (e) identify the effective date of the reviewer's opinions and conclusions;
- (f) identify any extraordinary assumptions necessary in the review assignment;
- (g) identify any hypothetical conditions necessary in the review assignment; and
- (h) determine the scope of work necessary to produce credible assignment results in accordance with the Scope of Work rule\*.

\* For clarification and according to USPAP, the Scope of Work Rule suggests that the appraiser must be prepared to support exclusion of any investigation, information, methodology, technique, that otherwise appears relevant. New information or conditions might necessitate reconsidering the scope of work. Lack of important information might necessitate withdrawing from assignment. The appraiser must not limit the scope of work so assignment results are not credible. Appraiser should not allow bias due to client's objectives or the intended use.

### **Standards Rule 3-3**

In developing an appraisal review, a reviewer must apply the appraisal review methods and techniques that are necessary for credible assignment results.

- (a) When necessary for credible assignment results in the review of analyses, opinions, and conclusions, the reviewer must:
  - (i) develop an opinion as to whether the analyses are appropriate within the context of the requirements applicable to that work;
  - (ii) develop an opinion as to whether the opinions and conclusions are credible within the context of the requirements applicable to that work; and
  - (iii) develop the reasons for any disagreement.
- (b) When necessary for credible assignment results in the review of a report, the reviewer must:
  - (i) develop an opinion as to whether the report is appropriate and not misleading within the context of the requirements applicable to that work; and
  - (ii) develop the reasons for any disagreement.
- (c) When the scope of work includes the reviewer developing his or her own opinion of value or review opinion, the reviewer must comply with the Standard applicable to the development of that opinion.
  - (i) The requirements of STANDARDS 1, 6, 7, and 9 apply to the reviewer's opinion of value for the property that is the subject of the appraisal review assignment.

- (ii) The requirements of STANDARD 3 apply to the reviewer’s opinion of quality for the work that is the subject of the appraisal review assignment.

**Fundamental Application of Standards Rules** – Based on the above Standards Rules, I have approached this fundamental valuation perspective as follows;

- (a) While my fundamental valuation perspective is not a formal review under USPAP standards, I have done my best to follow the approaches by which the standards outline the basis for a thorough review of a report. Specifically I will consider whether the;
  - (i) analyses are appropriate;
  - (ii) the conclusions made are credible; and
  - (iii) reasons for disagreement.
- (b) Specifically with regard to the report, I will consider whether it is;
  - (i) appropriate;
  - (ii) not misleading; and
  - (iii) reasons for disagreement.

### **USPAP Standard 9: Business Appraisal, Development**

Standard 9 of USPAP outlines what is involved in the development of a business appraisal. While the work completed by the OSKR partners, Daniel Rascher and Andrew Schwarz (“Rascher & Schwarz” or “R&S”), arrives at a conclusion of whether to reinstate sports programs at UAB, it is my belief that the closest USPAP standard for the development of this analysis falls under a business valuation umbrella. As such, Standard 9, specifically Standards Rule 9-1, 9-2 and 9-4;

#### **Standards Rule 9-1**

In developing an appraisal of an interest in a business enterprise or intangible asset, an appraiser must:

- (a) be aware of, understand, and correctly employ those recognized approaches, methods and procedures that are necessary to produce a credible appraisal;
- (b) not commit a substantial error of omission or commission that significantly affects and appraisal; and
- (c) not render appraisal services in a careless or negligent manner, such as making a series of errors that, although individually might not significantly affect the results of an appraisal, in the aggregate affect the credibility of the results.

#### **Standards Rule 9-2**

In developing an appraisal of an interest in a business enterprise or intangible asset, an appraiser must:

- (a) identify the client and other intended users;
- (b) identify the intended use of the appraiser's opinions and conclusions;
- (c) identify the standard (type) and definition of value and the premise of value;
- (d) identify the effective date of the appraisal
- (e) identify the characteristics of the subject property that are relevant to the standard (type) and definition of value and intended use of the appraisal, including;
  - (i) the subject business enterprise or intangible asset, if applicable;
  - (ii) the interest in the business enterprise, equity, asset, or liability to be valued;
  - (iii) all buy-sell and option agreements, investor letter stock restrictions, restrictive corporate chapter or partnership agreement clauses, and similar features or factors that may have an influence on value;
  - (iv) the extent to which the interest contains elements of ownership control; and
  - (v) the extent to which the interest is marketable and/or liquid.
- (f) identify any extraordinary assumptions in the assignment;
- (g) identify any hypothetical conditions necessary in the assignment; and
- (h) determine the scope of work necessary to produce credible assignment results in accordance with the Scope of Work Rule (as outlined above).

## Standards Rule 9-4

In developing an appraisal of an interest in a business enterprise or intangible asset, an appraiser must collect and analyze all information necessary for credible assignment results.

- (a) An appraiser must develop value opinion(s) and conclusion(s) by use of one or more approaches that are necessary for credible assignment results.
- (b) An appraiser must, when necessary for credible assignment results, analyze the effect on value, if any, of;
  - (i) the nature and history of the business enterprise or intangible asset;
  - (ii) financial and economic conditions affecting the business enterprise or intangible asset, its industry, and the general economy;
  - (iii) past results, current operations, and future prospects of the business enterprise;
  - (iv) past sales of capital stock or other ownership interests in the business enterprise or intangible asset being appraised;
  - (v) sales of capital stock or other ownership interests in similar business enterprises;
  - (vi) prices, terms, and conditions affecting past sales of similar ownership interests in the asset being appraised or a similar asset; and
  - (vii) economic benefit of tangible and intangible assets.
- (c) An appraiser must, when necessary for credible assignment results, analyze the effect on value, if any, of buy-sell and option agreements, investor letter stock restrictions, restrictive corporate chapter or partnership agreement clauses, and similar features or factors that may influence value.
- (d) An appraiser must, when necessary for credible assignment results, analyze the effect on value, if any, of the extent to which the interest appraised contains elements of ownership control and is marketable and/or liquid.

**Fundamental Application of Standards Rules** – Based on the above Standards Rules, I have approached the work completed by R&S as follows;

- (a) I have considered whether R&S have outlined the proper approach by which they conclude on their final opinion, specifically asking the questions;
  - (i) does the analysis follow generally accepted approaches for adjusting the manner by which UAB measures the financial strength of the three sports which it chose to discontinue;
  - (ii) does the analysis take into account all available information with regard to the presentation of these sports by UAB and the manner by which revenue and expenses are allocated from the university to these specific sports;
  - (iii) what, if any, are the extraordinary assumptions to the analysis;
  - (iv) what, if any, are the hypothetical conditions to the analysis; and

- (v) from the starting point, is there a clear development of the necessary adjustments, an application of logic in these adjustments and a clear presentation of the cause and effect between these adjustments and the concluded opinion.

With the above as my framework for consideration of work completed by Rascher & Schwarz, I offer the following perspective;

**Approach** – The overall approach by Rascher & Schwarz is strong. There is clarity of scope and a detailed approach to the analysis that is credible and one that I find both supportable and unbiased based on the definition of “bias” I outline below.

**“Bias”** – While the report suggests that R&S was perceived by the UAB administration as biased, specifically with regard to articles written by Andrew Schwarz, my fundamental approach to bias is based on a statistical definition that suggests; “a systematic inaccuracy in data due to the characteristics of the process employed in the creation, collection, manipulation, and presentation of data or due to faulty sample design of the estimating technique.”<sup>161</sup> Based on this definition, it is my belief that the R&S analysis and conclusion lacks bias, is strongly supported in the process by which information is collected, assessed and employed and is, based on my review and communications with the authors, is in no way manipulated or presented to support one specific conclusion.

**Assumptions and Conditions** – There is inherent weakness in analyzing a situation without full access to clean and auditable information. The R&S analysis admittedly lacks detailed information that can only be supplied by cooperating partners, specifically the University and Conference USA. However, in dealing with this level of incomplete data, it is my belief that the assumptions made that lack a clear audit trail to University or conference information are done with clarity and transparency with regard to the information available. Where subjective inputs are necessary, I find the assumptions to be conservative and, where applicable, based on extrapolations of known data with regard to UAB or other comparable universities. Additionally, where subjective inputs are required, I find there to be strong support with regard to the expertise of those making them, specifically Rascher & Schwarz.

**Replication** – In reviewing the financial analysis, I have found that all of the adjustments made to the analysis can be replicated with the data presented in the report and provided to the reader and are referenced in a manner that provides both transparency and ease of use.

**Sensitivity of Conclusion** – While R&S’s analysis clearly states that more work is needed to arrive at the strongest possible analysis and conclusion, there is a strong premise of sensitivity to key inputs that lack strong support or are subjective based on the expertise of its authors and/or industry research.

**Elements of Report** – I found clarity in the presentation of scope, client, effective date of the report, presentation of conclusions, support for assumptions and sensitivity of conclusions discussed above. I found the authors to fully possess the education, professional background and industry expertise to complete this work.

---

<sup>161</sup> <http://www.businessdictionary.com/definition/bias.html>

**Joseph M. Orlando, ASA**  
[jorlando@frankrimerman.com](mailto:jorlando@frankrimerman.com)  
707.967.5312



Joseph Orlando is a Director and heads the Business Valuation Practice at Frank, Rimerman + Co. LLP. He joined Frank, Rimerman + Co. in 2007 and brings a wide range of experience in fundamental valuation assignments for financial reporting and tax purposes. Mr. Orlando also has a broad background in corporate finance, M&A, investment banking, business development and corporate strategic planning in a variety of industries including technology, life sciences, craft beverages and sports.

### **Experience**

- Prepared and reviewed hundreds of valuations for a variety of purposes including:
  - Financial reporting under ASC350, 360, 718 and 805
  - Gift and estate taxes
  - Tax compliance under Internal Revenue Code 409A
  - Family law and litigation support
  - Management and strategic planning
  - Mergers, acquisitions and corporate finance (for private equity and public offerings)
- Managing Director – SVB Analytics
- Associate Director, Valuation Services – Navigant Capital Advisors
- Senior Manager, Valuation and Financial Advisory Services – BearingPoint, Inc.
- VP & COO, Global Corporate Finance – Credit Suisse First Boston’s Technology Group

### **Professional Organizations**

American Society of Appraisers – Treasurer and Business Valuation Discipline Director of ASA NorCal Chapter

### **Professional Presentations**

“Business Valuation – Notes from the Field” Santa Clara University, Santa Clara, California, June 2009

“Business Valuation Services to the Wine Industry” UC Davis Offsite Course, St. Helena, California, 2009 - 2014

### **License**

Accredited Senior Appraiser – American Society of Appraisers

Candidate for Appraisal Review Management Designation for Business Valuation (ARM-BV) – American Society of Appraisers

### **Education**

MBA in Finance – Georgetown University

BA in Economics – St. Lawrence University