Interview

Raymond Sauer

When people ask career counselors for advice, a common response is: Do something you love and you'll never be bored. It's a bit trite, of course, but it's also generally true. Raymond Sauer is a good example. He has been able to combine two of his interests — economics and sports — to his professional advantage. In a series of papers, he has used the tools of economics to answer questions from the world of sport, and in the process produced insights for economists working in industrial organization, labor markets, and other fields.

Sauer is chairman of the Department of Economics at Clemson University. In addition to his work on the economics of sports, he has written about the economics of regulation, monetary economics, and the organization of academic labor markets.

Since February 2004, he has maintained a blog devoted to economic commentary on sports and society, thesportseconomist.com, which features occasional posts by other contributors.

Aaron Steelman interviewed Sauer on the Clemson campus in Clemson, S.C., on Feb. 21, 2006.

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RF: How did you get interested in the economics of sports?

Sauer: I became interested when I read a paper assigned in my first graduate microeconomic theory course. It was titled "Pay and Performance in Major League Baseball" by Gerald Scully, and it appeared in the *American Economic Review* in 1974. I think that's one of the best papers written in economics in the past 50 years. It took economic theory, applied it to a relevant and current topic, and made a prediction. And, lo and behold, free agency came to Major League Baseball shortly afterward and proved Scully's theory and application to be dead on the mark.

Essentially, Scully studied data on players' productivity and wages from the late 1960s, a period when players were subject to the reserve clause. That meant they had virtually no bargaining power. They either re-signed with the team they were with or they went back to the farm, which some of them did. But when Marvin Miller, head of the players' union, argued that the contract actually permitted free agency and an arbitrator agreed with him, the whole game changed. Players began to be paid according to market rates, and salaries increased by multiples that were consistent with what Scully's model predicted.

So that paper was truly great and inspired me to look more closely at the economics of sports.

Then there was a paper that wasn't so great. The topic was the supposed inefficiency of betting markets in the National Football League (NFL). I had gotten interested in the work in rational expectations and financial market efficiency, and here was this paper that said it was easy to make money betting on football games, that there were opportunities just waiting to be exploited. I thought this was not consistent with theory, gathered data to assess its merits, and concluded it wasn't right. So that was the first time I applied economics to sports in a professional way, and it led to one of my earliest published papers.

RF: The field seems to be gaining popularity within the profession. Why do you think there is more research being done in this area now?

Sauer: I think it comes down to two things. One, economics is data-driven, and there are a lot of good data available in sports. Second, sports are popular and are a market like any other so they present useful opportunities to take economic theory and apply it to issues that interest a lot of people.

RF: Each of the four major North American sports leagues, with the exception of Major League Baseball, has faced a rival league over the past 40 years. In some cases, the rival league has introduced changes that the dominant league eventually adopted. And some of the rival leagues' franchises eventually became members of the dominant leagues following mergers. But none of those leagues was able to supplant the incumbent. Why? Can you imagine conditions under which one of the incumbents could be driven out of the market by a new entrant?

Sauer: I think it would take a colossal mistake for one of the major leagues to be supplanted by an upstart. There's a tremendous amount of social capital that is embedded in loyalty to teams, rivalries, and so on. That goes beyond appreciation of the game itself.

This is true in the North American leagues, but the best example is European soccer. If you watch the Italian Soccer League, for instance, you will see that the fans are packed behind the goal, which is one of the worst places to actually view the game. You get a much better view from being at midfield. But they are behind the goal for purely social reasons. So it's something other than the game itself that is capturing the attention and imagination of the fans. That's an extreme example of what I am talking about, but we see it in almost all sports. It's not easy to re-create that loyalty even if you introduce a new league with great talent and innovative rules.

I think the existing leagues have figured this out, and they design their competition to take advantage of it. Once upon a time, sport was performance art, like figure skating or boxing. It's not an event any longer. It's a drama that unfolds over the course of a season, which is a pretty long time, and leagues have structured themselves accordingly.

In fact, I think this is the biggest thing that separates sports which have been economically successful over the past 50 years from those that haven't. People no longer have great interest in watching a single event. They want to watch a sequence of events tied together over time that lead to a big finale like the Super Bowl or World Series.

Also, some of the sports that were very successful in the past but are having problems now, like boxing, are organizationally inept. Owners and officials in baseball, football, and basketball realized that they needed to become organized and unified and behave like a firm. That never happened in boxing. You have several warring factions that have been unable or unwilling to act together in the way that the team sports have. For instance, you still have several sanctioning bodies: the World Boxing Association, the World Boxing Organization, and the International Boxing Organization among others. That presents some real difficulties for the sport, from both a fan standpoint and an economic standpoint. Then, of course, there is the issue of corruption, which still exists and troubles the sport.

RF: How about rival leagues with less ambitious goals — leagues that aren't designed to become dominant but rather serve a niche market? Is there sufficient demand to keep those leagues afloat, given what you have said about consumer loyalty to existing teams?

Sauer: The Arena Football League fits that description, I think. The league has been going for some time now, a lot of people like the game, and the league is making money. It has an interesting business model, and markets itself as professional football, without attempting to supplant the NFL. It's satisfying a demand that is out there, and the players are highly versatile and talented athletes who just can't make it in the NFL. In part, that's because the skills required to play in the NFL have become so specialized.

Could the Arena League become more interesting than the NFL? Maybe. But it's going to be very difficult to get, say, Pittsburgh Steelers fans to switch their loyalties.

In general, I think we are looking from the top of the mountain now in professional sports. The growth that we have seen in the past century has been absolutely phenomenal. If you were living in 1950 and were trying to forecast what the most popular sport would be in 2006, you might have said horse racing. The NFL, NBA, and NHL weren't nearly as popular as they are today. Baseball was it in terms of team sports. Some other form of competition could, in the future, attract people's interest, but what that would be is very hard to say.

RF: What do you think accounts for this tremendous growth in professional sports?

Sauer: Looking at purely economic factors, you have to say that the growth in income and leisure time are most important. But there's no inherent reason why that increased income and leisure time would go toward sports instead of, say, opera. Sports have the advantage of being accessible. It doesn't require a great deal of time investment to understand and appreciate what is going on. There's another thing that I think is important. Most kids play sports from a very early age. And even if they don't progress with it and play on, say, their high school or college teams, they tend to maintain an interest in sports throughout their lives.

RF: What do you think of revenue sharing as a way to increase parity in professional sports leagues?

Sauer: Theoretically, it doesn't work. Revenue sharing decreases the monetary incentive to acquire talent in equal proportion for both big market teams and small market teams. And it works this way in practice also.

Let's consider an example of a league that has revenue sharing — the NFL. You have had franchises that for a decade apparently just didn't care about putting a competitive team on the field. Their teams could stink, they could lose fan base, but they could still collect a big check from the NFL and make money. The Cincinnati Bengals were a good example of that from the early 1990s until recently.

Generally, I think the NFL has a big problem. Red McCombs, the former owner of the Minnesota Vikings, was recently quoted as saying that the NFL had the best business model of any sport in the world. The owners do make a lot of money. But they didn't build the league by being socialist, and they are the most socialist sport in the world. That doesn't bode well for future growth.

I think it's more compelling to watch a clash of the titans than it is to see the best of a mediocre lot. NFL rules, which are designed to share the wealth and get parity, don't produce excellence. I think we saw that in the last Super Bowl. It was a mediocre event this year. People follow dynasties; they don't follow the winner of a coin-flip competition. And NFL rules, unless they are changed significantly, can produce something akin to a coin-flip competition.

Don't get me wrong. There are still great athletes in the NFL — some of the best athletes in the world — but, as I said before, we don't necessarily watch sports to see great individual performances. We watch them for the team competition. Also, in a sport like football, unless a great player is on the same team with other great athletes, his ability to showcase his talents is severely limited. For instance, if a guard misses a key block, it doesn't matter what the quarterback or wide receiver can do. One player's productivity is related to his teammates' productivity. So even the element of great individual performance is in jeopardy.

There are some people in the NFL who are aware of the problems that the league faces, and they may be able to push the league in a more competitive direction. But a lot of the owners who are raking in money now will resist. And as it stands, the NFL faces some very serious problems. Parity is not a goal worth pursuing at the expense of drama, excellence, and great competition.

RF: So you would say that parity is overrated?

Sauer: Yes. Look at Major League Baseball. The New York Yankees have had some lean years in their history. But, overall, they have been the model of excellence for a very long time. And people still love to watch them play — whether to cheer for them or to boo them.

European Soccer is another example of a sport that has had dominant teams for a long time. That's true, in large part, because teams are generally free to buy talent as they see fit. Players will move to the teams that most value their skills, and there is great competition among owners to attract those players. It's an open system, and there is a trap door at the bottom. If you don't win enough games, you fall into a lesser league. You might argue that they go a little too far in the direction of single-team or two-team dominance, but the sport is still extremely popular. I should also note that most European soccer teams actually do not make money over the long haul. They have huge revenues, but even bigger expenses. Most clubs need a capital call every few years, and generally there are wealthy fans and investors who are willing to meet those calls.

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RF: Do you find it surprising that many European countries which have public policies based on the social-democratic model at the same time have quite market-oriented rules for their sports teams, while in the United States the situation is often reversed?

Sauer: Sure. It's a deep irony. And I don't really have a good explanation for it. Perhaps a sociologist would be better equipped to answer that question than an economist.

RF: Are there economic reasons why professional soccer has had such a hard time gaining widespread attention in the United States, despite its overwhelming popularity in other parts of the world?

Sauer: I think it goes back to the social capital idea. It takes a lot to overcome the incumbent advantage of sports like baseball, basketball, and football, which are popular today in the United States. I think that, slowly, soccer will gain fans and there may be a tipping point. But one of the interesting things about Major League Soccer (MLS) is that some of the leading figures are also involved with the NFL. Lamar Hunt, the founder and owner of the NFL's Kansas City Chiefs, also is one of the founders of MLS and owns a team in the league. MLS has something like the NFL's business model. And I'm not so sure that Hunt really wants MLS to grow and for teams to compete in the way that some other owners in the league have in mind. For instance, their current business model — teams generally play in pretty small stadiums and don't bid for the services of the big European stars — doesn't make for a compelling, top-notch product.

So, getting back to one of your earlier questions, if there is a league that is ripe to be supplanted by an upstart, maybe it's MLS. There appears to be growing demand for professional soccer in the United States, and MLS is not meeting that demand very well, in my view. Sport these days is a media-driven business, and the skill on display in an MLS match is nowhere close to that in Europe. Americans will watch the more compelling spectacle, even if the match may be taking place in Barcelona or London.

Raymond Sauer

Present Position

Professor and Chair, Department of Economics, Clemson University

Previous Faculty Appointments

University of New Mexico (1985-1988)

Education

B.A, University of New Mexico (1979)
M.A., University of New Mexico (1981)
Ph.D., University of Washington (1985)

Selected Publications

Author or co-author of several papers in such journals as the *American Economic Review, Journal of Political Economy, Journal of Economic Literature, Journal of Finance,* and *Journal of Sports Economics*

RF: What do you think of proposals to pay college athletes?

Sauer: Well, actually there is some payment. Every time college players go on the road for an away game, they get a per diem payment to cover meals and other expenses. That's more than they used to get. Will this evolve into a system where there are significant monthly stipends, thousands of dollars per month per player? I doubt it.

For the big-revenue sports — like football and basketball — the money is there. For instance, coaching salaries have exploded recently, because if a guy can win without cheating, he's worth a tremendous amount of money to the school. The same is true of players. You can't necessarily identify who those guys are in advance. There are a lot of great high school players who wind up being only mediocre college players. But once it becomes clear who the stars are, those guys are worth huge amounts of money to their schools. But I think there is great aversion among sports fans to paying college players an amount that is something proportionate to the revenue that they bring to a school. Whether that is rational or not, I think it is a serious impediment to liberalizing compensation rules for college athletes.

RF: What do you think has been driving the realignment of major college athletic conferences?

Sauer: I think the fundamental reason is that competition has become national. In the old days, Clemson University used to play in the Southern Conference. But in the 1950s, Clemson and Maryland chafed at some of the Southern Conference rules and led the revolt to form the Athletic Coast Conference (ACC), which was built on the eight-team model that was very common then. The ACC was perceived as Tobacco Road, a regional conference that stretched across only four states: Maryland, Virginia, North Carolina, and South Carolina. But eventually that regional image was viewed as a liability and something that the conference wanted to shake, so it expanded all the way up and down the coast.

A similar thing happened in the old Pac-8, but earlier. They wanted to expand and actually added two schools in a state that doesn't even border the Pacific Ocean — Arizona and Arizona State — to form the Pac-10. The SEC expanded as well, and so did the Big 8. I think this has come at some cost to the sporting competition — for instance, North Carolina State will no longer play Duke twice a year in a home/home series — but to the advantage of getting national exposure and more media revenue. Schools in the ACC will now play conference games in Miami and Boston, two major media outlets, and that can be a big benefit.

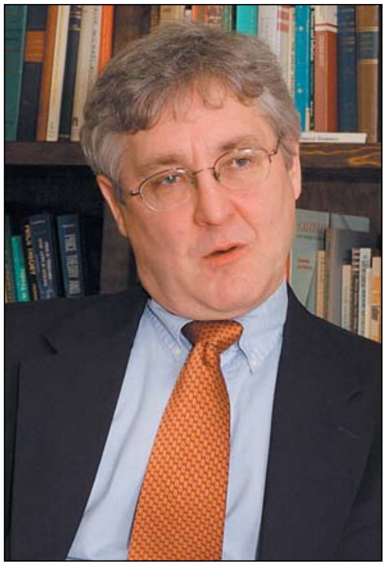
It's amazing when you look at the license plates from the students on campus here at Clemson. They come from everywhere. I think most universities that want to be perceived as quality places will try to get national recognition, and one big way to do so is by playing sports on national television. You don't get that type of exposure by playing only nearby schools. If you win big, you get noticed. So I think college athletics is a form of competition for attention, much like advertising.

RF: What do you think of the hypothesis that Michael Lewis put forward in *Moneyball*?

Sauer: *Moneyball* was a fascinating book. It had great writing, a great story, and was compelling reading. But at the core of it was an economic idea: that wages in the market for professional baseball players were not well-priced, and that one could exploit these discrepancies to win a lot of games at relatively low cost. In particular, the ability to take a pitch and to get on base in any way you could were undervalued. The Oakland Athletics — and, in particular, their general manager Billy Beane — figured that out, and were able to get to the playoffs for several consecutive years on a very tight budget.

At its core, I find the *Moneyball* hypothesis offensive. I tend to think that, as a general matter, labor markets work quite well, and returns to skill are valued appropriately. But the Oakland example was in opposition to my belief in labor market efficiency. So my colleague Jahn Hakes and I decided to investigate it more in a paper that will be coming out in the *Journal of Economic Perspectives*. We found that Lewis' offensive idea was correct. On-base percentage was undervalued, and buying on-base percentage went a long way toward explaining Oakland's success.

How do we explain this? I think what Lewis found was a very clear-cut example of institutional inertia. A lot of old



baseball scouts had a certain idea of which skills made for a good baseball player — and those weren't necessarily right. Yet once those ideas took hold, they tended to stick. Someone eventually questioned and tested them, and decided there was another way to evaluate talent. Beane was a real innovator, and he was able to exploit the opportunities that he saw. But it's very hard to do this over an extended period of time. This information will be exploited by others — indeed, we have seen it recently with several other teams. Just about every front office in Major League Baseball has guys poring through data looking for statistical patterns that can give them an advantage. As a result, there will be new innovations in assessing talent that might prove even more effective.

RF: Has the exposure that *Moneyball* received affected the field of sports economics?

Sauer: Not much, I think. The paper that Hakes and I did has been well-received and has been downloaded a lot. But I think there are some examples that go beyond *Moneyball* that are interesting to note here. There are a number of papers where people have modeled different games, and it's interesting for us as economists and applied econometricians to do those exercises. We don't have an impact on things very often, but occasionally we do. One example of this is the work that David Romer did on fourth-down decisions made by football coaches. If you model a football game properly, you can look at the costs and benefits of doing various things. The thing that Romer focused on was the decision to give up the ball on fourth down by punting. It turns out that coaches were extremely conservative on this point. They hardly ever went for it on fourth down, even in short-yardage situations in their opponent's territory. But if you look at the data, there are no real benefits from punting in those situations and the net costs can be very large.

Over time, I think Romer's message has gotten through. You see a lot more people going for it on fourth down than in the past. Bill Belichick, the head coach of the New England Patriots, makes decisions that are very data-driven — he was an economics major at Wesleyan — and he goes for it on fourth down a lot of the time. Similarly, you see more coaches going for the touchdown now instead of settling for a field-goal attempt. So coaches are increasingly taking risks when they are appropriate, and I think the work economists did pointing out the costs associated with excessive caution helped move them in this direction.

RF: People often complain that tickets to sporting events have become too expensive. But for many games, at current prices, demand greatly outstrips supply. Why don't franchises and leagues respond to such demand by upping the price of tickets instead of having them sold on the secondary market at prices well above their face value?

Sauer: Well, the tickets are more expensive now — a lot more expensive — because demand is so high. Part of what is going on is that quality seats have become luxury goods. So great tickets are very expensive, but baseball clubs can't give away upper deck tickets. The Oakland A's just decided to cover them up with a fancy tarp. So there is a tricky pricing problem here — how variable should prices be across seats and games, particularly when there is well-established demand for season tickets? Now, the clubs could operate secondary markets themselves, but if we look at rock concerts, the bands that adopt this function still price well below market. They attempt as best they can to keep the tickets in the hands of "real fans." On this point, I don't think economic reasoning has gotten us very far, even though an economist as brilliant as the late Sherwin Rosen took a crack at it.

RF: What do you make of the claim that white sports stars command a salary premium compared to black and Hispanic players of similar or even superior skill?

Sauer: A few of my colleagues have worked on these questions, and there is some evidence that white players do command a salary premium in today's market. The evidence is not especially strong and what does exist suggests that the premium is rather small. But it's there. One might regard it as prima facie evidence of discrimination. Or it could be something that is unobserved, correlated with race, and not captured in the model.

But, over a longer period of time, there is a lot of evidence of discrimination. Blacks were permitted to play in professional football, then banned, and then permitted to play again. In baseball, blacks were excluded for the first half of the 20th century. So the ability to even get on the playing field was limited by discrimination. You had integration, but it was a long, hard process. As social mores changed, there was real opportunity for innovation. There was this very large untapped pool of black talent out there, and innovators like Branch Rickey recognized it. What's interesting, though, is that the best teams led the drive to integration. They were the ones that first signed black players and so these teams got even better. Two of my colleagues at Clemson, Bob Tollison and Bobby McCormick, along with Brian Goff of Western Kentucky University, had a very interesting paper on this topic that appeared a few years ago in the *American Economic Review*.

As for salaries, I haven't seen good data from this period — say, the late 1940s and early 1950s. I would like for the question of wage discrimination from this era to be examined. The conditions then were stark, much starker than the present day. So one would suspect that the evidence for discrimination would be stronger than it is now.

RF: Elected officials often claim that professional sports teams bring substantial economic benefits to a city, both direct (spending at the stadium and nearby businesses) as well as indirect (makes the city more attractive to talented workers). How large are those benefits, in your opinion, and do they justify public funding of new stadiums?

Sauer: Well, I think the second claim is true. Many talented people do like sports, and those people generally like to live in areas where they can watch live sporting events. And since there are a limited number of pro franchises available, having a professional sports team is a benefit to a city. I don't think it's implausible that some companies base their location decisions, in part, on whether amenities like this are available to their employees and potential employees.

But the claim that new stadiums can act as a more general development tool strikes me as a pretty questionable idea. There has been a lot of work done in this area, and no reputable study has found that, on average, there are substantial economic effects. It's generally not a winning proposition for a city.

There might be more activity around a stadium or arena on the night of a game. But what about when those teams are on the road or it's the off-season? There are usually very few people around. Also, households generally have a budget for leisure expenses. If you build a stadium, you might see more dollars go to businesses around that stadium during certain times of the year, but that increased spending tends to be offset by reduced spending somewhere else.

To take a recent example, I think the deal Washington, D.C., struck to build a publicly funded stadium represents the ugly side of sports. Major League Baseball owners, in my opinion, took the residents of the District of Columbia to the cleaners. The league — meaning, essentially, the current teams' owners — set a limit on how many franchises there will be. So there are 30 teams, and when one of them is looking to move, a bidding war erupts among cities. And Washington, D.C., simply overpaid. Policymakers can spend other people's money pretty readily, and owners of franchises are taking advantage of that.

RF: One of the fastest growing sports is stock-car racing. NASCAR has gone from a pretty small and mostly regional sport to one with widespread national appeal. What accounts for its growth?

Sauer: NASCAR's rise — and its growth relative to Indy Car racing, for example — I think is due to its economic organization. The guys at NASCAR have been able to unify the old stock-car racing circuits into a more coherent organization, and they understand that people want to watch a season-long event. There are select races — Daytona, Talladega — that get more attention than others. But, generally, fans follow it over the course of a season, just like they do with team sports. NASCAR has refined its points race in a way that produces real drama. And we are seeing other individual sports follow NASCAR's lead. For instance, in golf, the PGA will implement a season-long points race next year.

RF: Getting back to your work on sports betting markets, are there some areas of those markets that are less efficient than others?

Sauer: As I said before, I think sports betting markets are overwhelmingly efficient. Bookmakers aren't in business to just give money away. They know what they are doing, and the point spreads they establish are a very good forecast of what is going to happen. But if there is one area where the lines tend to be wrong in something approaching a systematic way, it's with home underdogs. Betting on home underdogs in basketball and football, over a long period of time, tends to be slightly profitable. But the margins, even here, are quite small. Still, it suggests that we as fans, and also the bookmakers, don't have a really good understanding of what home-field advantage means for a team.

I don't want to make too much of this point, though. Betting lines are, by far, the best predictor of what is going to happen in a game. And that shouldn't be particularly surprising. There's money on the line, after all, and that's a powerful incentive to get things right.

RF: Do you have a sense of who reads your blog, thesportseconomist.com? Is it primarily sports fans, other economists, or a combination of the two?

Sauer: We have a pretty eclectic audience: sports fans, economists, reporters, all sorts of people. I launched it two years ago this month. I did it for one year by myself, but once it got some traction I decided to get some collaborators to bolster and expand the content. I think that's the right model for more academic-oriented blogs. If you can get a group of people who can stay focused on a relatively well-defined set of topics, then you can generate some really good material.

The blog is a nice medium because it gives you exposure to people you otherwise might not have met and ideas you might not have encountered. This includes even other economists who are doing work on similar questions, but with whom you are unfamiliar.

RF: Which economists have influenced you the most?

Sauer: I have picked up insights from a lot of people along the way. But the guy who made the biggest difference in my coming to Clemson and perhaps in the way I look at economics was Donald F. Gordon. Don was a brilliant economist. He never wrote very much, but what he did was pure gold. Just sitting and talking with him over lunch was quite an experience because you were in the presence of real genius. There's a quote in Doug North's Nobel Prize autobiography which says that Don Gordon taught him all the economics he ever knew. That may be overstating the case, but I never failed to learn something from every conversation that I had with Don. **RF**