SPORTS ECONOMISTS’ COMMENTARY ON WOLFERS-PRICE PAPER ON BIAS IN NBA REFEREEING

Victor Matheson (College of the Holy Cross [also a referee]):

My first general point is that most of you seem to consider making a call as a black and white (excuse the pun) issue when in fact a huge number of fouls are gray. In many cases you cannot look at an instance of contact and say a referee's decision, no matter what it is, is wrong. Thus, since referees are making a huge number of subjective decisions each game, there is ample room for either intentional or unintentional bias to enter in and go unnoticed.

As for the objective function of referees, in my experience it is to do the job that will please your employer (usually the league, but also, either directly or indirectly, the teams involved) the most. If the league and teams think you are doing a good job you get more and better games leading to better pay (the highest paying referee job in soccer in the U.S. is the MLS final, awarded to the "best" referee each year) and more job satisfaction. Referees are also ego machines (you need supreme self-confidence to make controversial decisions in front of 15,000 screaming fans), so the lure of the best games is a crucial motivator. Also in my experience the best way to make the teams think you are doing a good job is to get the obvious calls right and then call the gray ones in a way makes each team think they got a fair shake. This is why studies that suggest bias on the part of referees are surprising since being a biased referee is unlikely to make teams feel they got a fair shake.

In my opinion, the presence of an assessor at the game (there is one at every MLS and minor league pro soccer game in the US) could not possibly detect the sort of bias that the paper identifies. .1 to .2 fouls per 48 minutes per player means extra .5 to 1.0 fouls per game from an all white crew refereeing an all black team vs. an all white team. (How that translates into 3 or 4 extra wins per year is beyond me unless you assume that white referees change the entire dynamic of the game, which, of course, the authors do question.) In any case, no way is that picked up by the naked eye just like Moneyball suggests it is impossible for even trained scouts to tell the difference between a .275 and a .300 hitter without looking at the stats.

Finally, from a refereeing standpoint, I do not feel that not knowing who got fouled is important. When I am making a call, at least 80% of my attention is focused on the person I think is going to commit the foul, not the person I think is going to be fouled. Referees, again in my experience, are much more cognizant of players who are the criminals not the players who are the victims. I can always tell you at halftime the players on the field who have committed the most fouls, but I can rarely tell you who suffered the most fouls. In fact, a point of emphasis for referees in MLS for the past several years has been to be aware whether individual players are getting fouled a lot (especially if the are Freddy Adu, Landon Donovan, or David Beckham) even if it is different players committing the fouls because it is so easy to miss. Thus, if I am subconsciously racist on
the field (and I may be), it would almost surely manifest itself as me calling extra fouls on black players rather than me not calling fouls when black players are fouled.

Stefan Szymanski (Imperial College, London)

One study [of referee bias in soccer] showed that the biases were significantly reduced once the referees were paid to do the job. This is what puzzles me about the paper- if the systematic bias is as significant in determining results as the paper suggests, why are the umpires not in fear of getting caught indulging their taste for discrimination?"

Phil Miller (Minnesota State)

I thought of Orley Ashenfelter's model of arbitrator behavior (AER 1987, I believe) when I read Victor's comment. Perceptibly biased arbitrators will get struck from hearing cases. Because of the lucrative nature of being an arbitrator, arbitrators will want to appear to be unbiased, at least relative to other arbitrators. So it seems with referees.

If true, then if bias does affect calls, it must largely be subconscious and should appear in really gray cases.

Michael Leeds (Temple University)

I just skimmed the paper and may have missed something crucial, but it seems that the paper missed one or two crucial points. First, when someone commits a foul, someone else is fouled. Calling a foul on a black player is not likely to be a racist act when the player who is fouled is also black (at least the reasoning becomes much more complicated). Data for 2004-05 (the latest data I could grab hold of) shows that, on average, blacks shoot a little over 3.0 foul shots per forty minutes while whites shoot about 2.7. At the very least, this lessens the impact of differential foul calling.

In addition, some studies have shown that white players are disproportionately marginal players who do not play at crucial periods in the game. If this is so, and whites play largely when games are already decided, then the number of fouls they commit are also likely to be lower.

Victor Matheson:

I would suggest that the taste for discrimination is almost certainly a subconscious act on the part of the referees. It's hard to be worried about being unfair when you really believe you are being as fair as possible. Furthermore, even if they are biased, they're not likely to get caught. Given the subjective nature of officiating, the magnitude of the discrimination shown to exist is impossible to catch by the naked eye even with the aid of the video tape. Evidence of discrimination can really only be captured statistically, but even when presented with such evidence the NBA pulls a Guantanamo Bay and says they
have better evidence but it's a secret. (Shameful response from the NBA, in my opinion. You want the league to protect us referees from the idiots like Chelsea's Jose Mourinho but not from honest dealers like Wolfers whose research could actually be used to improve officiating.)

**Dennis Coates (University of Maryland, Baltimore County):**

I think the point is actually that often times calls are not black and white. A charge versus a block is largely a judgment call. A blocked shot versus a foul in the act of shooting is often a judgment call. Referees make those calls in a split second. The bias that is reported suggests to me that in that instant some inherent bias on the part of referees plays a significant role in the call. But I am not sure I believe the results, as I said before. I suspect that the "blocker" and the "charger" are equally important in that split second, whether the referee could later say who was fouled or not. Big slow guy will get the foul far more often than small quick guy, no matter what actually happens. And small quick guys are often free to mug big slow guys with little chance of fouls being called. (Spoken like the big slow guy I am, I know.)

**Allen Sanderson (University of Chicago):**

(The NBA shifts/mixes crews throughout the season.) But the larger point, made by Dennis as well, is that there is no way for W&P to distinguish who's the victim; that is, who got fouled -- white (foreign) guy or a black player? So they really don't know the race of the ref making the call nor the player who got fouled. (Free throw attempts, which is in the paper, is a weak correlate for a variety of reasons.) I see this as the biggest defect in the paper/analysis.

There is a head ref or crew chief in each instance, but the data set can't identify him/her. They -- the authors -- also haven't teased out the maturity/experience of the ump team, though NBA players know very quickly -- by adding the three numbers on the refs' jerseys (given my seniority) whether the crew is a veteran or not. The NBA also assigns a fourth person for each game -- not a ref but a league official -- who goes over calls via video tape with the crew at halftime and immediately at the end of the contest, which would seem to make it less likely that there is some systematic bias. (Trivia: About 1-2 % of the crews are all black.)

**Dennis Coates:**

Dan, I don't think there is an objective function in the paper, and referee behavior is not modeled in a utility or income maximizing context. I think, given the context, that the issue is much more a psychological one than one in which referees or anyone else makes a considered decision to discriminate.

Nonetheless, I have my doubts about the findings on a couple of levels. The first is the one the NBA proclaims, that they analyze calls by referee teams rather than individual referees. The second issue is that there are many possible omitted
variables. For example, it is not clear how they control for the characteristics of the player having been fouled. They do say that some of the results suggest something about the race of the potential victim, but from my skimming the paper I don't follow their argument. Their long equation on the bottom of page 7 top of page 8 does not clearly indicate if anything about the fouled player is incorporated in the regression. It strikes me this is important because this discriminatory effect would likely translate into even greater likelihood of calling a foul on an opposite race player if the victim was the same race as the referee. Team effects are included, but it is not clear if opposing team characteristics are. Third, I don't know enough about the three man crews, and perhaps this is in the paper, but is their make up constant during a season or do referees move from one crew to another during the season? Is there any difference based on the "head" referee, assuming there is such a thing? I can't tell from a quick reading what are observable referee characteristics.

**Dave Berri (California State University, Bakersfield):**

This is not a paper about basketball. It is a paper about how people judge people who are different (in this case, of another race). And this paper shows evidence that people are judged differently based on race. Given the circumstance, that is an impressive finding. NBA referees receive a great deal training. Their decisions are consistently reviewed. If they were racists, you would think they would not choose this line of employment. Given all this, Price-Wolfers still find an effect. So I think that is the important story. Even in a situation where you would think implicit bias wouldn't be there, it is still there.