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*Journal of Sports Economics* 2003; 4; 154  
DOI: 10.1177/1527002503004002005

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## Comment

# "Competitive Balance in Sports Leagues: An Introduction"

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*The authors summarize the literature on competitive balance to point out that there is no need for Zimbalist's editorial position that a single measurement of competitive balance is the correct measure, whereas others are not. Different measurements are of different use, and all lines of research into competitive balance have, to date, proven quite instructive. To ignore this is to forgo important insights into the behavior of competitive balance.*

**Keywords:** *sports economics; professional sports; competitive balance; measuring competitive balance*

In a recent symposium in the *Journal of Sports Economics*, articles on competitive balance ranged from the editorial (Zimbalist, 2002), to the methodological (Hall, Szymanski, & Zimbalist, 2002; Humphreys, 2002; Marburger, 2002; Noll, 2002), to the philosophical (Sanderson, 2002). The methodological and philosophical articles can be judged on their merit in the usual way by the discipline.

But editorial introductions seldom receive the same treatment. We feel Zimbalist's introduction is deserving of scrutiny because it goes beyond the usual executive summary of the symposium content, suggesting that some efforts at measuring competitive balance are more useful than others.

A literature review on competitive balance, absent from Zimbalist's editorial, would have served the reader well on at least two dimensions. First, symposium readers new to the issue of competitive balance would have a broader exposure to a variety of future investigation of this critically important topic. Second, it would be

JOURNAL OF SPORTS ECONOMICS, Vol. 4 No. 2, May 2003 154-160

DOI: 10.1177/1527002503251641

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apparent that the guest editor has taken (in our opinion) an unfortunate and unnecessary position on measuring competitive balance.

In the next section of this Comment, a parsimonious categorization of the literature on competitive balance is presented to provide a broader base for analysis in the future. In the third section, we show how such a review renders Zimbalist's strong statements on measuring competitive balance unnecessary. Conclusions round out this comment.

### THE LITERATURE ON COMPETITIVE BALANCE

The theoretical developments concerning competitive balance all follow from Rottenberg (1956) and El-Hodiri and Quirk (1971, 1974). The reader is referred to Fort and Quirk (1995) for a review of the early theory. Theoretical implications of the open talent market in world football, contrasted to the North American closed talent market, are developed in Hoehn and Szymanski (1999) and Dobson and Goddard (2001). Other differences between the North American and world models concern the objective functions that might characterize the latter, pursued by Kesenne (1996, 1999, 2000). Marburger (2002), whose symposium paper also should be added to the list, provides a nice list of the remaining theoretical contributions on competitive balance.

The empirical literature on competitive balance is easily characterized along two distinct lines. First, there is the analysis of competitive balance (ACB) literature itself. The ACB literature focuses on what has happened to competitive balance over time or as a result of changes in the business practices of pro sports leagues. The second line of literature on competitive balance analyzes its effect on fans. This line of literature tests the longstanding uncertainty of outcome hypothesis (UOH) literature, measured during the season and relative to team chances in the playoffs.

The ACB literature includes Demmert (1973), Scully (1989), Balfour and Porter (1991), Quirk and Fort (1992), Vrooman (1995), Butler (1995), Fort and Quirk (1995), Szymanski and Kuypers (1999), Dobson, Goddard, and Ramlogan (2001), Eckard (2001a, 2001b), Fort (2001), Schmidt (2001), and Maxcy (2002). The UOH literature includes a much longer list and thanks to the thorough reviews in Dobson and Goddard (2001) and Garcia and Rodriguez (2002), we do not have to repeat it here. From that long line, one would move on to include Schmidt and Berri (2001), the just-mentioned Garcia and Rodriguez (2002), and now the symposium paper by Humphreys (2002).

This review is important because there is no context for the editorial comments in the symposium without it. With this review as background, it becomes clear that symposium readers new to the issue of competitive balance have more to draw from than what Zimbalist offers. He focuses exclusively on the UOH approach. In addition, as we show in the next section, the guest editor has taken (in our opinion) an unfortunate position concerning the measurement of competitive balance.

TABLE 1: Winning Percentage Standard Deviations, 1990-2001

<i>Year</i>	<i>American League</i>	<i>National League</i>
1990	0.057	0.057
1991	0.061	0.061
1992	0.063	0.066
1993	0.055	0.093
Average 1990-1993	0.059	0.069
1994	0.066	0.072
1995	0.083	0.060
1996	0.069	0.056
1997	0.062	0.058
1998	0.081	0.088
1999	0.076	0.079
Average 1996-1999	0.072	0.070
Decade average	0.067	0.069
2000	0.054	0.069
2001	0.095	0.065

### AN UNFORTUNATE STANCE

The two-line characterization of the literature on competitive balance makes it clear that the guest editor adopts an unnecessary position concerning the measurement of competitive balance. Zimbalist (2002) argues that there is a best way to measure competitive balance, namely, “the one to which the consumers show the greatest sensitivity” (p. 112). He then proceeds to argue that the standard deviation of winning percentages serves poorly for this task:

The problem with this index of competitive balance, however, is that fans do not experience it. If a fan of the Carolina Panthers is told that he or she should not be distressed that the team went 1 and 15 in 2001-2002 because the sample of games was too small to reveal the true strength of their team, it is likely that he or she would be unimpressed. (p. 113)

This statement clearly is in the context of the UOH literature and its focus on competitive balance as it affects fans. But Zimbalist’s insistence that there is a single best measure of competitive balance is misguided in light of the ACB thread in the literature. Both UOH and ACB contributions are important to our understanding of the relationship between league behavior, competitive balance, and fan welfare. And the standard deviation of winning percentages is a perfectly acceptable tool for ACB practitioners.

This is clear from Table 1, which employs the standard deviation of winning percentages back to 1990. Historically (see Fort, 2001), the decade averages for competitive balance in the two leagues are comparable to previous decades. But this ACB look at competitive balance also suggests some interesting analysis within the

decade. For example, compare the 1990-1993 and 1996-1999 periods (excluding the strike-impacted years, 1994-1995, but with Major League Baseball's [MLB's] new revenue-sharing scheme in place in 1996). It is clear competitive balance declined in the period after the strike in the American League (AL) (38%) but not in the National League (NL). This result was fueled by especially dramatic changes in 1998-1999. A clear suggestion is that the revenue sharing scheme put in place in 1996 bears further analysis! Especially because balance has grown in both leagues into the first two seasons of the current decade (we attribute the large standard deviation of winning percentages in the AL for 2001 to the Mariners' record-tying performance). ACB analysis suggests some theoretical application to determine the reasons behind this competitive balance roller coaster ride through the 1990s.

It must be granted outright that the observations in the preceding paragraph offer little to those interested only in UOH analysis, because ACB analysis does not relate competitive balance to fan welfare. But tracking the changes in balance through ACB analysis is an important exercise in its own right if one is interested in the effect of league business changes on balance. And the standard deviation of winning percentage is useful to this aim.

Zimbalist's unnecessary stance also leads him to suggest an intellectual climate against UOH analysis that we cannot find in the literature. Zimbalist (2002) offers the following generalization without citation:

Many observers, although acknowledging that baseball has been imbalanced since 1995, do not see a problem. They argue that baseball has had imbalance and dynasties in the past, yet it has continued to thrive. The present Yankee dynasty, for instance, is compared with the one between 1949 and 1965. The last period of Yankee dominance in the 1950s and early 1960s, however, was not a time that baseball should seek to emulate. (p. 114)

But this is a statement that confuses a simple ACB observation with some sort of statement concerning its importance to fans. Although the issue of fan welfare is outside ACB analysis, it is not an issue that invalidates the ACB approach.

The confusion could be cleared up easily by remembering that the two lines of inquiry in the literature have different goals. There really is no controversy—UOH is aimed at measuring fan welfare and ACB aims at tracking balance itself. Even if ACB analysts found that competitive balance had dramatically improved, it could still be true that fans found it detestable. This could only be revealed by UOH analysis.

And a careful reading of the literature also reveals that there is no intellectual current flowing from ACB analysis that diminishes the importance of UOH analysis of competitive balance. We count ourselves among these unnamed many observers who have found that competitive balance is, by and large, as it always has been. Indeed, dating back to Scully (1989), this is one of the most consistent ACB findings. But we take exception to Zimbalist's claim that any ACB analysts ever have argued either that (a) competitive balance is not a problem, or (b) history

should be emulated. Neither of these contentions, either in his symposium introduction or elsewhere in nonrefereed opinion pieces (Zimbalist, 2000, 2001a, 2001b, 2001c), happens to describe any statements by these unnamed many observers.

Recently, for instance, Eckard (2001a, 2001b), Schmidt and Berri (2001), Fort (2001), and Maxcy (2002) draw precisely the conclusion that MLB competitive balance in the 1990s is pretty similar to its historical levels. But nowhere in any of these works is there a single statement that there is no problem with competitive imbalance or that the past should be emulated. Indeed, Fort's (2001) testimony is quite specific that there is a problem with any economic outcome where market power is operative as it is in MLB. And the level of competitive balance in MLB is determined under just such circumstances.

That some of these researchers draw historical comparisons does not mean that they are arguing for a return to the era of high socks, wool uniforms, no draft, and the reserve clause. Instead, the implication of these recent ACB findings is that arguments for some sort of dramatic intervention in the name of competitive balance cannot be based on claims that competitive balance has declined. ACB analysis simply concludes that such is not the case over the long haul. Fans and policy makers may be more interested in competitive balance today than in the past, a UOH question to be sure, but it cannot be because of a dramatic decline in its level.

Form follows function, we suppose—if one adopts a strongly stated position, then one must confront the self-proclaimed adversary. But we feel such a stance is counterproductive. ACB and UOH analyses actually are (weak) complements. Changes in competitive balance discovered by ACB analysts suggest that some changes in balance may represent especially important episodes for UOH analysis. But UOH analysis also may find that significant changes in fan preferences toward competitive balance have occurred even if ACB analysis reveals that competitive balance has remained unchanged.

Zimbalist is entitled to his opinion, which appears to be that the analysis of fan reaction to competitive balance is of overriding importance. But such a position is not supported by the literature and ignores important ACB approach contributions for no good reason. For example, suppose the discipline took his opinion to heart and the ACB line of research ended today. Improvements in the understanding of how competitive balance responds to various policy actions would be lost, surely not a net valuable outcome.

## SUMMARY

In the recent symposium on competitive balance, guest symposium editor Andrew Zimbalist dismisses offhand much of the extant literature on competitive balance and takes a strong position concerning the best way to measure competitive balance. We find no support for this position in the literature. Furthermore, such a stance goes hand in hand with abandoning an important line of competitive balance analysis.

We make our point first by reviewing the longstanding theoretical and empirical analysis of competitive balance along two fairly distinct lines. The ACB line of analysis is interested in measuring the behavior of competitive balance over time, especially relative to changes in the business approaches of pro sports leagues. The UOH line of analysis is interested in the effect of competitive balance on fan welfare.

We argue that there is no need to argue that one line of analysis is somehow more important than the other. The ACB line of analysis dismissed by Zimbalist actually can be a weak complement to UOH analysis. Attempting to bolster his stance, Zimbalist also claims that some observers have argued competitive balance is not a problem because ACB analysis reveals it has not changed over time. Although the finding is one of the mainstays of ACB analysis, we find that no ACB analyst ever has argued that it is not a problem. Indeed, those that address the issues argue just the opposite. We urge competitive balance analysts to proceed with both ACB and UOH analysis. Only this two-pronged approach can enhance our understanding of both (a) the relationship between competitive balance and changes in the business approaches of leagues and (b) the importance of competitive balance to fans.

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