WIN A WORLD SERIES, RAISE TICKET PRICES. BUT, EXCESSIVELY?

by

Ryan M. Keohane Paul M. Sommers

September 2007

MIDDLEBURY COLLEGE ECONOMICS DISCUSSION PAPER NO. 07-13



DEPARTMENT OF ECONOMICS MIDDLEBURY COLLEGE MIDDLEBURY, VERMONT 05753

http://www.middlebury.edu/~econ

WIN A WORLD SERIES, RAISE TICKET PRICES. BUT, EXCESSIVELY?

by

Ryan M. Keohane Paul M. Sommers

Department of Economics Middlebury College Middlebury, Vermont 05753 psommers@middlebury.edu

WIN A WORLD SERIES, RAISE TICKET PRICES. BUT, EXCESSIVELY?

The Boston Red Sox celebrated wildly on the field in St. Louis in October 2004, having just completed a sweep of the Cardinals and ending an eighty-six year World Series championship drought. Prior to the 2004 season, diehard Red Sox fans would have been willing to pay practically anything to see their beloved Red Sox break the "Curse of the Bambino". However, in the spring of 2005, the Red Sox announced ticket prices for the coming season and many fans experienced sticker shock. Ticket prices in Boston climbed 9.3 percent to a league-high \$44.56 [1]. Was the 9.3 percent increase commensurate with ticket price increases elsewhere? Or, were Red Sox fans paying the price of winning a championship?

Does a World Series championship in Major League Baseball translate into significantly higher ticket prices in the following season? If winning a title increases the demand for tickets, then *ceteris paribus* ticket prices should rise. As other teams attempt to improve team quality to become more competitive, their ticket prices will also rise. Presumably, ticket sales are sensitive to the previous season's standing. And, higher win percentages have been shown to lead to higher ticket prices [2, p. 276]. But, will ticket prices for World Series champions rise even higher? Using data on ticket prices for all teams over the period 1991 to 2005, we find that owners of a World Series champion increase ticket prices differently from the rest of the league.

Table 1 shows the average ticket price increase (all of which are "weighted" averages by seat type) for World Series winners and all other teams in Major League Baseball (MLB) from 1991 to 2005 (excluding 1994, when in August of that year the players went on strike, leading to cancellation of the remainder of the season, including the World Series). Ticket price data for all teams are from http://rodneyfort.com/PHSportsEcon/SportsEcon.htm. A series of one-tailed,

1-sample *t*-tests were performed on the null hypothesis,

$$H_0$$
: $\mu = \mu$ World Series winner

against the alternative hypothesis,

$$H_A: \mu < \mu_{\text{World Series winner}}$$

where μ denotes the average ticket price increase of all non-championship teams (and $\mu_{\text{World Series winner}}$ denotes the ticket price increase for the title holder). In eight of the fourteen comparisons (nine, if the level of significance is $\alpha = .10$ rather than $\alpha = .05$), the World Series champion hiked ticket prices more than the average increase for all other clubs. The Chicago White Sox notwithstanding, the only exceptions to this pattern are teams that repeated as World Series champions over the period 1991-2005 [namely, the Toronto Blue Jays in 1993 (after winning in 1992), the New York Yankees in 1999 and 2000 (after winning in 1998), and the Florida Marlins in 2003 (after winning six years earlier in 1997)].

Concluding Remarks

The league's average ticket price has gone up every year from 1991 through 2005, but World Series winners have raised ticket prices substantially more in the following season. This result is neither a single-team nor a market size phenomenon; seven different franchises hiked ticket prices more than other clubs after winning the World Series. If fans pay above-average (below-average) ticket prices for above-average (below-average) baseball, then they should expect to (and, more often than not, actually do) pay dearly to watch a championship team.

Table 1. Ticket Price Increases in Major League Baseball, 1991-2005

Average ticket price increase the following year (percent)

Year	World Series champion	World Series champion	All other teams	p-value on difference
1991	Minnesota Twins	12.61	3.37	<.001
1992	Toronto Blue Jays	6.43	4.03	.015
1993	Toronto Blue Jays	1.46	9.46	1.000
1994				
1995	Atlanta Braves	8.83	5.15	.006
1996	New York Yankees	25.93	8.13	<.001
1997	Florida Marlins	11.57	8.93	.073
1998	New York Yankees	13.75	9.48	.007
1999	New York Yankees	11.19	13.09	.662
2000	New York Yankees	-6.48	7.82	1.000
2001	Arizona Diamondbacks	5.26	3.38	.026
2002	Anaheim Angels	35.45	3.70	<.001
2003	Florida Marlins	-6.57	5.22	1.000
2004	Boston Red Sox	9.30	5.02	.004
2005	Chicago White Sox	1.16	5.16	.995

^{*}All comparisons are 1-sample, one-tailed *t*-tests.

References

- 1. C. Isidore. "Ticket Prices Going, Going ... Up," *CNN Money*, April 5, 2005 http://money.cnn.com/2005/04/04/news/funny/baseball_ticket_prices/.
- 2. P. M. Sommers, "Ticket Prices and Player Salaries in Major League Baseball," *Journal of Recreational Mathematics*, 1994, vol. 26(4), pp. 274-276.