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Economic Impacts from 2006 Detroit Tigers' Game Attendance

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INTRODUCTION

On Sunday, September 24, 2006, the Detroit Tigers secured a playoff spot by beating the Kansas City Royals 11-4 at Kauffman Stadium in Kansas City. The last time the Tigers appeared in the playoffs was 1987, when they lost to the Minnesota Twins in the American League championship series.

Yet to be determined is who the Tigers will play in the first round of the 2006 playoffs, and whether or not they will enjoy home field advantage. What is certain is that every seat will be filled for each playoff game, and that throughout the regular season, the Tigers' winning ways brought record crowds to Comerica Park in downtown Detroit.[1]

Regardless of how much these baseball fans spend before, during, and after the games, it is a safe bet that the Detroit area economy has benefited from extra attendance at Tigers' regular season games, and will further benefit from the playoff games. Our analysis concludes that larger regular season crowds have had an economic impact of $36.2 million, and that if the Tigers reach the World Series and play the maximum number of home games possible, the economic impact from attendance at playoff games could amount to $71.7 million.

1. According to the Detroit Tigers Organization, 2006 attendance is expected to reach 2.6 million, about 168,000 more than the attendance record set in 2000, the year Comerica Park opened. The team has also announced that playoff tickets are already sold out.

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LIKELY ECONOMIC IMPACT: PLAYOFFS

We estimate a net economic impact on the Detroit area of $3.9 million for each first-round playoff game, $5.5 million for each American League Championship Series game, and $9.5 million for each World Series game played at Comerica Park in Detroit. This is the impact associated with attendance at the games, and does not include other expenditures such as shirt sales, increased traffic at sports bars, etc. See Table 1 on page 5 for details of our calculation.

The cumulative economic impact of the playoff run will, or course, depend on how many games are played in Detroit. If the Tigers were to make it to the World Series with home field advantage, and play every home game possible (3 in round one, 4 in the ALCS, and 4 in the World Series), the economic impact from game attendance could total $71.7 million. However, in the unfortunate (and unlikely) scenario that the team loses home field advantage and is swept is in the first series, it is possible only one home game is played, and the economic impact from attendance would reach only $3.9 million.

Assumptions

Attendance. Based on news reports announcing all Tigers' playoff games are already sold out, we assume that 42,000 people will attend each first-round playoff game in Detroit, and that this rises to 42,250 for ALCS games, and 42,500 for each World Series game.

Attendee Expenditures. We assume that each person attending the playoff games will spend $5 on parking (or $15 per car containing 3 people), and an additional amount on food, drinks, souvenirs, and entertainment before, during, and after each game. These amounts are estimated to be $35 for round one game, $40 for ALCS games, and $45 for World Series games.

Ticket Sales. According to the Detroit Tigers, the average ticket price at Comerica Park during the playoffs is $55 for round one, $95 for the ALCS, and $215 for the World Series. Major League Baseball gets 40% of the ticket price for playoff games, so only the remaining 60% of revenues from ticket sales generates an economic impact in the Detroit metro area.

Substitution Effect. We assume a 15% substitution effect. This is to say that 85% of all spending is net new spending, and only 15% substitutes for already anticipated expenditures. This is a higher portion than we would normally estimate, for two reasons. First, given the 19 year playoff drought and the increased regular season attendance, it appears demand is sufficient to cause fans to spend beyond already anticipated budgets. Second, these games will draw fans—and their money—from outside of the metro Detroit area.

Economic Multiplier. To estimate the indirect economic impact of the Tigers' playoff run we have applied a multiplier of 1.6, which equates to assuming that for every dollar of direct expenditure, there will be an additional $0.60 of eco-

nomic activity generated in the area. This is consistent with the multiplier used in our analyses of the economic impact of the 2006 Ryder Cup and Super Bowl XL.

ECONOMIC IMPACT: REGULAR SEASON ATTENDANCE INCREASE

A playoff appearance is not the only benefit that can be attributed to the Tigers' success this season. Their winning ways have also increased interest in the community, resulting in more fans coming to each game. In fact, the team has announced that attendance at Comerica Park this year will exceed the record set in 2000, the inaugural year for the park.

Compared to recent years, the Tigers estimate that the average game in 2006 has drawn 7,500 more fans. As a result of this attendance boost, we estimate that there has been a $446,400 economic impact per game, which comes to $36.2 million over the course of 81 Tigers' home games. See Table 2 on page 5.

Assumptions

Attendee Expenditures. In estimating the economic impact on the Detroit area of this attendance boost, we assume that for each game there is $5 in parking and $25 in additional spending, per person.

Ticket Sales. According to the Detroit Tigers Baseball Organization, the average ticket price for regular season games was $21, and only a "negligible" portion of the ticket price is paid to Major League Baseball. We conservatively allocated 5% for MLB.

Substitution Effect. We assume that 25% of all expenditures, including the game tickets, parking, and additional expenditures, should not count toward the total economic impact because they are just substitutes for spending that would have occurred in the Detroit area even without the Tigers' regular season success. We use a higher substitution effect here than for the playoffs because regular season ticket demand is lower than playoff demand, and the regular season would draw fewer people from out of the area, on average.

Economic Multiplier. To estimate the indirect economic impact of the Tigers' regular season attendance increase we have again used a multiplier of 1.6, which is consistent with our playoff calculation.

COMPARISON WITH SUPER BOWL XL

In February 2006, Detroit hosted Super Bowl XL. The event drew 70,000 fans to the Detroit area. Our firm prepared an estimate of the event's economic impact, pegging it at $49.3 million. This is an impressive impact for a single sporting event, but the estimated $36.2 million impact from an increase in regular season attendance at Tigers' games is almost as large as Super Bowl XL's impact. The impact of a long Tigers' playoff run could be even larger, despite

the fact that most baseball playoff attendees will be from the area, and will not have to spend on accommodations, additional meals, car rentals, etc.

CONSERVATIVE "IMPACT" ASSESSMENT

AEG has completed a number of other impact assessments, which are often recognized afterwards as the most reliable and timely available. The basis for this methodology is stated in the book *Business Economics and Finance* written by Patrick L. Anderson.[2]

Unfortunately, many "economic impact" reports do not follow a consistent methodology or a conservative approach, and are done largely for public relations purposes. Our analysis uses a consistent, conservative methodology that avoids double-counting of costs or benefits, properly accounts for the shifting and substitution of economic activity, and does not unnecessarily inflate the impact by using excessive multipliers.

Substitution Effects. To illustrate how a failure to account for the shifting of economic activity can exaggerate an economic impact, consider the following. The expenditures of a family from Warren attending a playoff game at Comerica Park rather than going to dinner and a movie do not have a net economic impact on the area—their expenditures are simply a shift in economic activity away from another local activity. It is an economic impact, however, if they go to the game in addition to going to the dinner and movie. The true economic impact of an event only accounts for net benefits, that is, dollars spent in the area otherwise spent elsewhere or not at all.

Multipliers. Another reason for other reports' exaggeration is the tendency to use multipliers that exaggerate the indirect impact of an event. One reason for this is a failure to consider how much of each dollar spent is transferred out of the local economy, such as profits from a restaurant or hotel chain going back to headquarters outside of the area.

SOURCES

In arriving at these assumptions we reviewed a variety of past reports on the topic, including:

- "Likely Economic Impact to Ireland from the 2006 Ryder Cup," AEG Working Paper 2006-09, 2006.
- "Likely Economic Impact of Super Bowl XL," AEG Working Paper 2006-10, 2006.
- The 2004 Economic Impact Estimate of Super Bowl XL prepared by Dr. David Allardice of Lawrence Technological University.
- "Padding Required: Assessing the Economic Impact of the Super Bowl," by Robert Baade and Victor Matheson.

2. Patrick L. Anderson, *Business Economics and Finance,* CRC Press, 2004.

Economic Impacts: Detroit Tigers Baseball on Metro Detroit Area

Table 1. 2006 Playoffs

	Round One	ALCS	World Series
Avg Attendance	42,000	42,250	42,500
Avg Ticket Price (1st Round)	$ 55	na	na
Avg Ticket Price (ALCS)	na	$ 95	na
Avg Ticket Price (World Series)	na	na	$ 215
Additional Expenditures	$ 35	$ 40	$ 45
Food, drinks, souviners…(per person)			
Parking (per person)	$ 5	$ 5	$ 5
Total Expenditure Per Game	$ 3,990,000	$ 5,915,000	$ 11,262,500
less:			
MLB Share of Ticket Price (40%)	$ (924,000)	$ (1,605,500)	$ (3,655,000)
Substitution Effect (15%)	$ (598,500)	$ (887,250)	$ (1,689,375)
equals:			
Direct Economic Impact	$ 2,467,500	$ 3,422,250	$ 5,918,125
apply multiplier of 0.6			
Indirect Economic Impact	$ 1,480,500	$ 2,053,350	$ 3,550,875
TOTAL ECONOMIC IMPACT PER GAME	$ 3,948,000	$ 5,475,600	$ 9,469,000

Table 2. 2006 Regular Season Attendance Increase

Avg Additional Attendance Per Game	7,500
Avg Ticket Price	$ 21
Additional Expenditures	$ 25
Food, drinks, souviners…(per person)	
Parking (per person)	$ 5
Total Expenditure Per Game	$ 382,500
less:	
MLB Share of Ticket Price (5%)	$ (7,875)
Substitution Effect (25%)	$ (95,625)
equals:	
Direct Economic Impact	$ 279,000
apply multiplier of 0.6	
Indirect Economic Impact	167,400.0
TOTAL ECONOMIC IMPACT PER GAME	446,400.0
IMPACT OVER 81 HOME GAMES	$ 36,158,400

NOTE: The substitution effect is assumed greater during the regular season as demand is lower for non-playoff games, and because lower prices make attending the game a more likely substitute for some other form of expenditure that would have occurred regardless of the event being held. The 0.6 multiplier matches that used in our 2006 Super Bowl and Ryder Cup Economic Impact Reports Both are online at www.AndersonEconomicGroup.com.

DATA: Ticket information provided by the Detroit Tigers Baseball Organization. Other information based on AEG estimates.

ABOUT ANDERSON ECONOMIC GROUP

Anderson Economic Group LLC specializes in regional economics, business consulting, expert testimony, and market studies.

AEG's past clients include:

- Governments, such as the states of Michigan, North Carolina, and Wisconsin; the cities of Detroit, MI, Cincinnati, OH, Norfolk, VA, and Fort Wayne, IN; counties such as Oakland County, Michigan, and Collier County, Florida; and authorities such as the Detroit-Wayne County Port Authority.
- Corporations such as GM, Ford, Delphi, Honda, Metaldyne, Taubman Centers, The Detroit Lions, PG&E Generating; SBC, Gambrinus, Labatt USA, and InBev USA; automobile dealers and dealership groups representing Toyota, Honda, Chrysler, Mercedes-Benz, and other brands.
- Nonprofit organizations, such as Michigan State University, Wayne State University, Van Andel Institute, the Michigan Manufacturers Association, International Mass Retailers Association, American Automobile Manufacturers Association, Automation Alley, and the Michigan Chamber of Commerce.

For additional information, see the AEG web site at: http://www.AndersonEconomicGroup.com.

ABOUT THE AUTHORS

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