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Choosing the Optimal Area of Economic Impact

Economic impact studies are used often in the field of sports economics. They tout the benefits of events like the Olympics and the Super Bowl as well as of facilities and teams. Regardless of the methodology used by researchers, all economic impact studies have one thing in common – they all measure impact on a specific area or "local economy."

One struggle for those commissioning and conducting studies is to define the best area of impact. The area of impact should be representative of the region directly effected by the event. Often, there is no a clear answer. A city, a county, a metropolitan statistical area (MSA), a region, or a state can all be defined as a local economy.

The following case studies provide some insight into choosing the area of optimal impact.

Background

Economic impact is based on the theory that a dollar flowing into a local economy from outside of the local economy is a benefit to the locality. In order to measure economic impact, the cause of the impact must first be identified. In sports economics, the cause is generally an event, a team, or a stadium. The second step involves identifying the local economy to be measured.

Choosing the area of economic impact is one of the earliest steps because it effects the sampling methodology, the surveying techniques, and ultimately the definition of a visitor and a resident.

Economic benefit is measured through direct spending, which has two different components. The first component is direct expenditures from visitors. In other words, at games or events how much are people spending? This includes how much they are spending for their entire stay on hotel rooms, food, rental car, etc. The second component is organizational spending. How much is spent by the team or local organizing committee in their normal course of business?

Direct spending is the largest component of economic impact but also the easiest component to miscalculate. Measuring direct spending requires careful delineation between local area residents and out of area visitors. Only the money originating outside of the local economy and spent within the local economy is considered economic impact. Money spent by local area residents is simply a re-circulation of the existing economy. For that reason it is not gross spending at an event that is measured, but the net gain from non-local sources.

A dollar spent by a visitor at a restaurant will work its way from the restaurant, to the hostess, to her family, to a grocery store, and finally to a produce grower in an adjoining county. This is just one example of the path a dollar can take upon entering the local economy. Whereas the money spent by visitors and organizations is direct spending, the money that re-circulates similar to the above example is considered indirect spending. This indirect spending is measured by multipliers and is added to direct spending to arrive at total economic benefit.

Most studies fail to make a distinction between economic benefit and economic impact. The differentiation is a very important one:

- Economic benefit is the economic gain in a predefined local economy
- Economic impact is the total economic loss or gain after costs have been accounted for.

True economic impact studies account for losses to the local economy due to the measured event.

In the case studies below, costs are left out in an attempt to draw relationships between two disparate events. In this way economic benefit can easily be compared.

Case Study 1 – Annual National Event in a Major MSA

The first case study involves an national event that is held each year in a different US city. In the year measured here, the event was held in one of the top five MSA markets.

There are two calculations performed for economic benefit. The first is the entire five-county MSA and the second is the single county in which the event took place. See Table 1, below, for details.

Table 1. Annual National Event in Major MSA

	MSA Area	One-County Area	% change
Visitors	15,526	16,801	8%
Residents	3,139	1,864	-41%
Visit Days	4.4	4.3	-2%
Average Spending/person/day	$162.10	$151.90	-6%
Direct Expenditures from Visitors	$11,073,563	$10,973,552	-1%
Total Direct Spending	$12,999,663	$12,899,645	-1%
Average Multiplier	1.845684	1.673663	-9%
Total Economic Benefit	$23,146,354	$20,810,847	-10%

The first effect of changing from a MSA to a single county area is an increase in visitor attendance and a decrease in residents. Because economic benefit is measured by the spending of visitors, it is generally assumed that a larger number of visitors will lead to a higher economic benefit.

The decrease in area of impact from a MSA to a single county area causes the number of visit days to decrease. Local MSA residents, who are now classified as visitors, will be more likely to be defined as day-trippers or those who attend an event without spending the night because they live close enough to drive from home. With more day-trippers in the visitor sample, the average spending per person per day by visitors decreases as well.

Direct expenditures from visitors are a simple function of number of visitors, length of stay, and spending per person per day. Therefore fewer visit days and a lower spending per person per day would normally lead to a decrease in direct visitor expenditures if not for the increase in number of visitors. In this example, the direct expenditures from visitors remains statistically unchanged.

As mentioned above, total direct spending is the sum of visitor spending and organizational spending. In this case, organization spending remains unchanged between the different local economies.

Multipliers, which are industry-specific and local economy-specific, general decrease in a smaller area of impact. It is assumed that in a larger area of impact a single dollar will re-circulate more times before “leaking” or leaving the local economy. The more times a dollar re-circulates the higher the multiplier. Therefore, in a smaller economy it is generally observed that a dollar leaks faster, leading to smaller multipliers.

In this example, a larger economic benefit is achieved by choosing the MSA as the area of impact. In a large MSA, the larger multipliers provide a boost to economic benefit which can not be made up by the larger number of visitors in the single county model.

Case Study 2 – Minor League Team in a Small Market

The second case study involves a minor league team playing in one of the 100 largest MSA's, but in a city generally assumed to be a small market. The team plays roughly 40 home games each year.

In Table 2, below, there are two calculations performed. The first is for the entire seven-county MSA and the second is for the single county in which the team physically plays.

Table 2. Minor League Team in Small Market

	MSA Area	One-County Area	% change
Visitors	34,163	75,770	122%
Residents	136,889	95,287	-30%
Visit Days	1.47	1.21	-18%
Average Spending/person/day	$24.30	$20.56	-15%
Direct Expenditures from Visitors	$1,220,337	$1,884,976	54%
Total Direct Spending	$1,798,707	$2,463,336	37%
Average Multiplier	1.545112	1.552598	0.5%
Total Economic Benefit	$2,718,962	$3,718,370	37%

As in the event case study above, the change from a MSA to a single county area causes a clear increase in the number of visitors. In this case, the increase is dramatic due to the long playing season.

The number of MSA residents who are now classified as day-tripping visitors are less likely to spend money locally on food, lodging, or other services. Because the games are within close commuting distance, the visit days as well as the spending per person per day decreases.

In spite of the decrease in visit days and spending per person per day, the large increase in visitors actually allows the direct expenditures from visitors to increase. This increase in direct visitor spending added to organizational spending causes total direct spending to increase.

As mentioned before, it is generally assumed that smaller areas of impact will have smaller multipliers. Although, in this case, the multipliers for the MSA and for the single county area are virtually identical. This exception can be explained by the nature of the local economy.

The result is a larger economic benefit for the single county area than for the MSA. Even if the multiplier for the single county area had decreased by 25%, the single county area would still have a larger economic benefit due to the significantly large increase in visitors.

Summary

When conducting an economic impact study it is important to fully analyze the market in question as well as the nature of an event. One time events, especially those which draw visitors from significantly outside of the area, will benefit from using a larger area of impact. On the other hand, teams, and especially those which draw from a wide regional base, will benefit from a smaller area of impact.

Yet it is still vitally important to use an area of impact which properly represents the event being measured. If the annual event in the large MSA was based completely in the single county area, if the visitors were known to stay exclusively in the single county area, and if the expenditures were substantially in the single county area, then it is more truthful to report the economic impact for the single county area. On the other hand, if the visitors were lodged in widely distributed locations and clearly spent their money in more than one county, it is more honest to report the economic impact for the MSA.

The same level of decision making applies to teams as well. In most cases, minor league and major league teams are viewed as regional entities that effect and benefit more than those simply within arbitrarily drawn city or county lines.

The bottom line is that a knowledgeable researcher informed about the locality being measured, the type of event, and the features of visitor spending can effectively adjust the perceived economic benefits.