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An Economic Impact Study of the Illinois Shakespeare Festival

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Abstract

This study will be focused specifically on creating an economic impact study and identifying an economic multiplier for the ISF that has the potential to be used by its marketing or grant writing team as evidence of the festival's economic value to the community.

Keywords

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I. Introduction

Since 1978, the Illinois Shakespeare Festival, or ISF, has been an important cultural attraction for the Bloomington-Normal community. What once started as small-scale performances of classic theatre on the tennis courts of Ewing Manor has grown into a full sized venue with a full sized audience. The festival hosts over 10,000 guests each summer and employs seven full time staff and a large number of seasonal staff over the summer months; 125 were listed in their most recently available annual report (Season Report 2012). The festival also has an extensive summer camp program, community outreach, and a touring company. The Illinois Shakespeare Festival's cultural impact has been documented in media all over the world, from Chicago to England (Illinois Shakespeare Festival).

However, despite their long-standing reputation and significant employment, the Illinois Shakespeare Festival only covers around 25% of its million-dollar budget through ticket sales (Seasonal Report 2012). The rest of the income largely comes from donations, fundraising, and university support (Seasonal Report 2012). As a company that relies on external sources for its income, the ISF must make its case for donors to continue contributions to help keep the festival running, often by offering special perks (Illinois Shakespeare Festival). The incentives to donate are largely the personal or social benefits of supporting the arts. However, by analyzing the festival's economic impact on the surrounding community, it is possible that there is actually a positive economic effect in addition to a social one. This information could be of significant interest to fundraisers at ISF and donors alike. There were 198 donors listed on the 2012 season report who could be interested in knowing how their donations have affected their local economy beyond just the festival (Seasonal Report 2012).

Economic multipliers are an indication of how money spent on one economic enterprise, in this instance the ISF, ripples into additional economic effects. For example, a dollar used to pay an ISF employee will likely be later spent locally by that employee, resulting in additional economic activity. The impact study will help quantify a number of factors, including direct effects like employee compensation, and indirect effects like hotel costs paid by those who have traveled to see the festival. The multiplier number quantifies the magnitude of additional economic activity created and is put into an input-output model to determine the total effect on economic activity. If a sector of activity were to have a multiplier of 1.66, for each dollar of input you would expect to yield $1.66 in final economic output (Coughlin and Mandelbaum, 1991). According to a national study done by Americans for the Arts, average audience members spend $24.60 per event excluding the cost of admission (Arts and Economic Prosperity IV). This means that events like the ISF have the potential to bring in extra revenue for its surrounding community almost equal to the cost of their actual ticket. Findings from a study about the multiplier for the ISF might be particularly interesting as the final total output calculated by this impact study might indicate the festival is actually economically advantageous despite failing to break-even without their donor support.

This study will not examine ways for the festival to rely less on donor support, or increase ticket sales, and while there are many other cultural institutions in the Bloomington-Normal area, I will limit research to the Illinois Shakespeare Festival. It would be interesting to create an argument for public spending in support of the ISF, measuring the increase in tax revenue, but that is a topic for another study. This study will be focused specifically on creating an economic impact study and identifying an economic multiplier for the ISF that has the potential to be used by its marketing or grant writing team as evidence of

the festival's economic value to the community.

II. Literature Review

The core theory behind this work is the use of an input-output model. The seminal theorist was Wassily Leontief (1941), who originally proposed the idea of finding multipliers that could be used to connect how an increase of input in one industry might affect economic output in others. Leontief conducted his original work on the entire American Economy in the 1920s (1941). While his model, and variations of it are still widely used, it was met with some criticism due to some of the assumptions it relies on. In 1968, Carl Christ of the National Bureau of Economic Research offered several criticisms of the model's assumptions; the foremost being the model indicates constant returns to scale (Christ, 1968). However, Christ's work was not designed to completely undermine the use of input-output models, but more as a caution to those who used them that their findings might be overly optimistic.

A major development in Leontief's theory was the work of Isard (1951) who theorized that input-output models could be applied on a regional scale instead of a national one. This development later helped Moore and Peterson (1955), who became the first to create a regional multiplier when they developed multipliers specific to the state of Utah. After years of multipliers being created individually, the Bureau of Economic Analysis began creating regional multipliers, on RIMS II tables, on a larger scale in the 1970s (Bess and Ambargis, 2011). The RIMS II tables use census data to periodically calculate multipliers that would work for in "any set of contiguous U.S. counties." (Bess and Ambargis, 2011). These multipliers could be used to calculate four variables, —gross output, value added, earnings, and employment. Though, like Leontief's original work, the widespread use of regional multipliers has also been met with criticism. Coughlin and Mandelbaum (1991) noted several weaknesses including "the accuracy of leakage measures, the emphasis on short-term effects, the absence of supply constraints, and the inability to fully capture interregional feedback effects." (Bess and Ambargis, 2011). Like the criticism of earlier work, Coughlin and Mandelbaum reject the level of optimism of these models, but do not reject their usefulness as an economic tool.

There have been many empirical studies of cultural economics that relate to this particular research problem or use a similar input-output model. In 1997, Gazel and Schwer conducted a survey-based study of the effects of a three-day Grateful Dead concert in Las Vegas. Attendees were asked to fill out a survey and report their spending habits while they were visiting Las Vegas, and the results indicated that somewhere between 17 and 28 million dollars were added to the local economy during that three day period. A few years earlier, DiNoto and Merk (1993) collected data from arts organizations across Idaho to calculate the total economic impact for the state using RIMS II multipliers. Their conclusion was that although the magnitude of expenditure was small, there is a net financial gain from supporting the arts. In a study more to scale with this one, Mitchell (1993) conducted a study on theatre festivals in small Ontario communities, each with a budget of less than $2 million, like the ISF. Data was collected on budget and average income of those in attendance. Conclusions were based on comparisons across the nine communities studied, where it was found that the communities who could support tourism were best equipped to reap economic benefits. The final study of note was a more recent statewide impact study; the Arts Alliance Illinois and the Americans for the Arts collected data for Illinois in 2012 where they estimated that the $1.59 billion spent on Illinois nonprofit arts organizations generates $1.19 billion in addition economic activity.

My contribution to this work will very much build off the previous work done in the field of cultural economics. Several studies have used RIMS II multipliers on large-scale regions and several studies have looked at festival style and theatrical events, though with a different research question in mind. My plan is to combine the small-scale festivals with RIMS II methodology when studying the ISF. The previous work I have read on small-scale festivals did not employ an input-output model, which leaves an opportunity for my research to contribute to the current literature. The small scale with RIMS II multipliers specific to McLean County will provide a more direct look at a very specific organization and provide answers to a specific group of interested parties on their economic impact.

III. Data and Methods

The data used in this project have been received

from the Cultural Data Project. The CDP collects data from over 14,000 individual arts organizations across the United States, including the ISF (About the CDP). The measurements utilized in this study will be ticket sales, total salaries, and total expenses. All of these measurements were yearly, beginning in 2008 and ending in 2013, giving six observations; a graph of the ISF's data appears in Figure 1 of the appendix. Some important points of note include the salary ($626,977) and expense ($1,077,844) maximums in the year 2012, which is also the minimum value for ticket sales ($184,339). It is important to note that according to the ISF Season Report 2012, attendance was down due to unusually high temperatures that summer, affecting ticket sales to their outdoor theater (Season Report 2012).

In order to better understand the relationship between these variable and more easily identify trends over the years, they were then graphed into percentages of the total expenses (Figure 2). The year 2012 had, as expected, the minimum value for ticket sales as a percentage of expenses (17.1%) and the maximum value for salaries (58.17%). The year 2008 had the reverse, with the minimum for salaries (36.46%) and maximum for ticket sales (28.82%). Looking at the graph as a whole, there is clearly a general upward trend in salaries as a percent of expenses and a slight downward trend in ticket sales as a percentage. This information is important to note as it indicates a higher cost of paying employees while ticket sales continue to dwindle, forcing the ISF to rely on other sources of income.

In addition to the ISF, data was collected on three other performing arts organizations in McLean County: the Community Players, Heartland Theatre Company, and Prairie Fire Theatre. The same variables were analyzed, though Heartland and Prairie Fire do not pay salaries, and not every company reported for all six years. The Community players only reported four years of data and Prairie Fire only reported two. To better account for the variance across the years reported and for outliers in the data, the values were averaged over the number of years available. The results were graphed in Figure 3, but because the ISF's figures are significantly larger than those of the other three companies, the Y-axis was converted into logarithmic scale. One important point in this figure include the ISF's average expenses of $930,304, which is over 700% larger than the next largest arts organization (Community Players, $124,305). In terms of

expenses, salaries, and ticket sales, the ISF is clearly the largest performing arts organization in McLean County.

The methodology used in this study will be based off the RIMS II regional economic multipliers. The multipliers are created by the Bureau of Economic Analysis (BEA) and use information from the 2010 McLean county census and the 2002 benchmark input-output table for the nation. The benchmark is the national input-output table created for each industry, that is then adjusted based on the regions specific economic structure. Input-output tables, according to BEA writers Bess and Ambargis (2011), "provide multipliers that can be used to estimate the economy-wide effects that an initial change in economic activity has on a regional economy".

In the RIMS II table, the Illinois Shakespeare Festival falls under the industry category of performing arts companies. There are six multipliers associated with each industry, but this study will focus on two particular multipliers; output and employment. Output "represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to [corresponding] industry" and employment "represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to [corresponding] industry" (RIMS II Tables). These multipliers were selected because they have an easily understood direct effect on the local economy.

To put the multipliers used for the ISF in perspective, they were compared to other attendance based organizations: spectator sports, museums/historical sites/zoos/ parks, and amusement parks. The multipliers were graphed and can be found in the appendix as Figures 4 and 5. When comparing the output multipliers across these industries, performing arts and museums/historical sites/zoos/ parks have a similar multiplier at just above 1.22. The museum multiplier is slightly higher than the performing arts'. Spectator sports and amusement parks have a multiplier of just above 1.17. The difference in the graph appears large, but the performing arts multiplier is only around 4% larger than that of the spectator sports or amusement parks. However, when dealing with a million dollar budget like the ISF, that 4% represents $40,000 annually.

Across the four ticketed industries, the employment multiplier is much more varied. According to the RIMS II tables, the performing arts industry

creates an estimated 39 jobs per million dollars of input compared to sports which creates 12, museums which creates 17, and amusement parks which creates 14. This large difference between the performing arts and the other three industries could be for a few reasons. It is possible that jobs in the arts pay less than jobs in the other industries, allowing for more jobs to be created per dollar of input, but it is also possible the arts organization's multiplier is higher because the industry is very labor intensive, as illustrated by the ISF's high salaries as a percentage of budget.

There are some limitations to the data and methods used in this paper. While having several years of data is a strength, more years would give an even clearer picture. An unfortunate weakness of the methodology is that the benchmark year (2002) is over ten years old. A more recent benchmark would likely create a more accurate multiplier.

IV. Results and Conclusions

Prior to any calculations with the multipliers, the data needed to be adjusted for inflation. This was done using the Bureau of Labor Statistics' online inflation calculator, which utilizes the Consumer Price Index to calculate inflation. The data were transformed into 2012 values, as that is the last year reported in the Cultural Data Project's database for the ISF.

Once adjusted for inflation, the expenses were averaged over the six-year period which yielded an average of $977,785 per year of direct economic impact. Using this number and the RIMS II output and employment multiplier, I calculated the average yearly total economic impact. For output, which now included the indirect impact, the result was $1,193,387 in total economic activity. When totaled over the six years studied, the overall output is calculated at $7,160,322. For employment, the result was nearly 38 additional jobs created as a result of the economic activity.

The findings I have reported are consistent with the previous literature on the subject. In their study on Idaho's performing arts economy, DiNoto and Merk (1993) noted that although the magnitude of expenditure was relatively small compared to other industries, there is still a significant and positive overall impact. This holds true for the ISF. While its expenditures are small compared to other McLean County institutions like State Farm which had a total revenue of over 70 billion dollars across the company last year (State Farm), the nearly $1.2 million dollars

of total impact the ISF adds to the economy is still significant, especially as a not-for-profit organization. Furthermore, while insurance agencies like State Farm may have a larger output multiplier of 1.31, the performing arts' employment multiplier is nearly five times the size of that of insurance agencies which have an employment multiplier of only 8.2. This finding is also consistent with the previous literature, as Mitchell (1993) discussed how festivals are particularly beneficial for employment.

There are several policy implications that can be derived from this study, but the people most affected by these findings will be the fundraisers at the Illinois Shakespeare Festival and their donors. Fundraisers will be able to utilize this information to advocate for more money from donors or from their corporate and state sponsors. The donors would be able to use this information to make an informed decision on whether or not this is a good use of their own money. Because the ISF is a non-profit, donors will not benefit much from looking at financial statements that show very little profit, or sometimes none at all. Instead, for more economically minded donors an impact study will be a more effective way to justify their donations for economic purposes in addition to social ones. Furthermore, knowing that the employment multiplier was so high compared to other ticketed industries, many of which are also non-profits, could be the deciding factor for some donors who might have to choose between the ISF and a local museum or park. In a time where a lot of focus is directed towards job growth, both in the public and private sectors, the ISF fundraisers could use the employment multiplier findings to its great advantage.

While the findings were consistent with previous studies that used RIMS II multipliers, it is important to note that the research area in this study is significantly smaller. To further expand the research in the future, I would like to compare my findings for McLean County against findings from a variety of other counties. I would like to incorporate factors into my comparisons such as population size, density, and median income to better understand what factors affect a region's performing arts RIMS II multiplier.

Furthermore, this model did not address the effects of tourism and expenditures from out of town guests who have come to visit the festival. In Mitchell's (1993) work on the effects of theatre festivals on small Ontario communities, it was noted that the communities best equipped to handle tourism would reap

the most benefits. Therefore, I find it important to measure the effect that the ISF has on tourism and its related industries to create a better picture of how it is affecting McLean County.
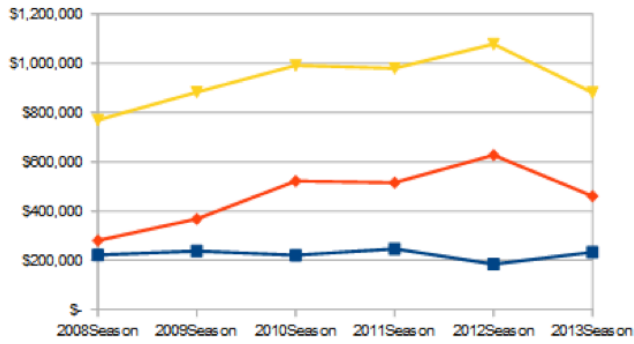
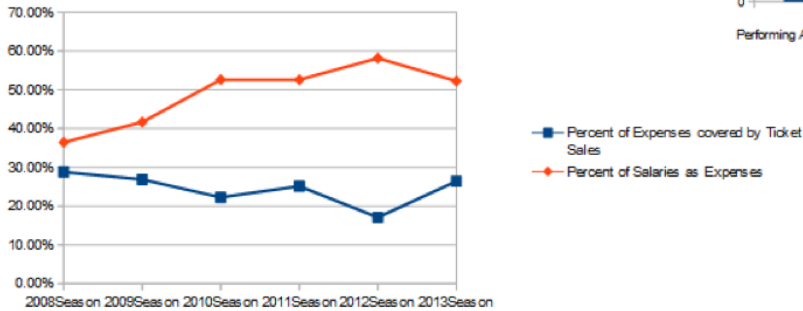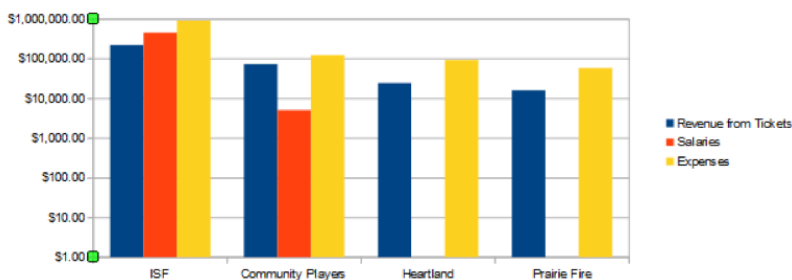## Appendix
Figure 1

Figure 4

Figure 2

Figure 5

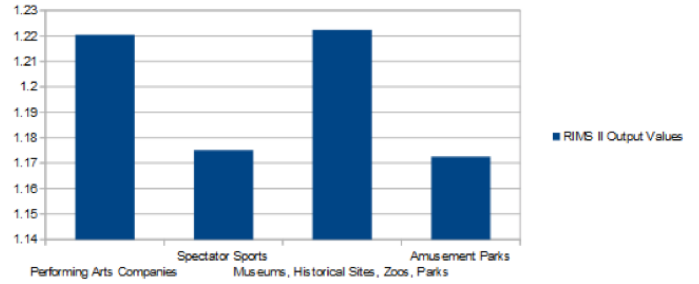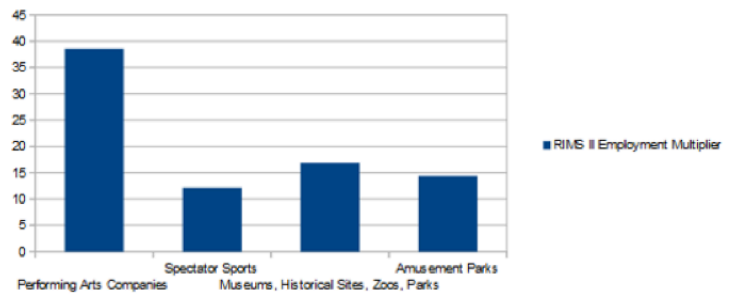### Figure 3

*Note the y axis above is in logarithmic scale

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