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The Economic Impact of Professional Sports Teams: A Case Study of the Oklahoma City Thunder

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The Economic Impact of Professional Sports Teams: A Case Study of the Oklahoma City Thunder
The Economic Impact of Professional Sports Teams: A Case Study of the Oklahoma City Thunder

By

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Submitted to The Department of Economics
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I hereby recognize and pledge to fulfill my responsibilities as defined in the Honor Code and to maintain the integrity of both myself and the College as a whole.

Patrick J. Martinelli
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Abstract

The overall objective of this research is to identify whether or not professional sports franchises have an impact on their local economy. Specifically, the research focuses on the Oklahoma City metropolitan area the Thunder, the city’s professional basketball team. A member of the National Basketball Association (NBA), the Thunder is Oklahoma City’s only professional franchise in the four major sports: basketball, baseball, football and hockey. Oklahoma City was chosen as the subject of the case study because it is possible the economic impact of the Thunder is different because it is the only franchise present in the city. The data analyzed throughout the paper span from 2001 to 2015, giving a seven-year time period prior to the organization’s arrival in 2008 and an equal time frame after their arrival. The variables taken into account in the study show the economic climate of Oklahoma City from 2001 to 2015. Furthermore, statistics were also taken into account to highlight the popularity of the organization. While it is difficult to put an exact number on the size of the impact the Thunder makes on Oklahoma City’s economy, the data suggest that it is reasonable to suggest that the organization does have a positive, but slight, impact on the local economy.
Chapter 1: Introduction

When any major professional sports league in the United States talks about a possible expansion of teams within their league, numerous cities are thrown around as potential locations for a new franchise. The largest issue at hand is whether or not the local government should subsidize the construction of an arena or stadium large enough to host the potential team using tax payer dollars. Proponents of accepting a professional team argue that a team moving into the city will help the local economy. It is often suggested that building a large arena to attract a team will result in positive economic outcomes, including an increased employment rate, an increased value of real-estate in the city and surrounding suburbs, potential higher salaries for workers in the area, and an increase in revenue for local businesses. In addition to these economic gains, analysts also suggest the potential intangible benefits gained from having a professional sports team. Many believe a city’s status is enhanced when it has at least one professional sports team, which has caused multiple cities in the past to put them in a position to compete for a new franchise.

There have been many occasions of cities trying to persuade ownership groups to relocate their franchise. In Major League Baseball (MLB), the Montreal Expos moved to Washington, D.C. for the 2005 baseball season. The city of Nashville was successful in getting an NFL team to relocate to their city. After a failed attempt to attract a National Hockey League team, Nashville was able to obtain the Tennessee Titans, formerly the Houston Oilers, prior to the 1998 season. Nashville had been in the hunt for a professional franchise in order to improve their status as a city, and was successful in doing so by bringing in the Titans. It was recently announced that the NHL would expand their league, including a new franchise, the Golden
Knights, in Las Vegas, Nevada. Similar to these cities, Oklahoma City received a professional sports team in 2008, when the Oklahoma City Thunder, of the National Basketball Association (NBA), left Seattle for Oklahoma City. The move to Oklahoma City by the Thunder was more similar to the Titans relocation to Nashville and the NHL’s expansion to Las Vegas.

Oklahoma City attracted their first professional sports team in 2008, when the Seattle SuperSonics decided to relocate their franchise. What separates the Thunder from most franchise relocations, and makes them more similar to the Titans and the Golden Knights, is the lack of a major professional team prior to the event. In 2008, the Thunder became the first major professional sports team in Oklahoma City, just as the Titans did in 1998 and the Golden Knights will do in 2017. Many believe the presence of a professional sports team has a positive impact on a city’s economy. The purpose of this paper is to determine whether or not that effect is any more or less significant when the city has never had a professional sports team in the past. In order to identify the gravity of the impact, a case study will be performed on the Oklahoma City economy prior to and after the relocation of the Seattle SuperSonics.

The literature and data gathered for this paper will be used to address two major questions. First, what impact does introducing a sports team have on the local economy in that city? Secondly, how does the impact change when the team being introduced is the first major professional sports team in the city’s history? The case study will be in reference to the Oklahoma City economy in the years leading up to the move of the Thunder. This data will then be compared to the Oklahoma City economy in the years following the Thunder’s relocation. The change in economic indicators will give an insight into how the sports team was able to impact the local economy. The indicators that will be taken into account are the employment rate
before and after the team’s move, the real-estate value during both time periods, and how much money was spent on related, local businesses. Things like local bar and restaurant revenues, as well as hotel revenues, will be taken into account before and after the Thunder were present.

The literature reviewed for this paper looked at the impact of professional sports teams, facilities, and major sporting events on a local economy. The literature gives opinions and insight on the size of the impact, as well as whether or not the franchise is beneficial or detrimental to the economy. The following section will be used to review, analyze, and critique the literature related to this topic.
Chapter 2: Literature Review

Rosentraub (1997) writes about the impact that professional sports teams have on their local economies. The author discusses the measurable, economic impact professional sports teams have on their cities. He argues that people who support the presence of professional sports teams estimate that the franchise would have a positive effect on the city’s economy. Proponents usually suggest that as a result of a sports team, and thus a sports arena, the employment rate will increase, as well as wages. It is also often noted that related businesses, like hotels, bars, and restaurants, will also see higher revenues as a result of a professional sports team being in the area. The author goes on to talk about the intangible impact that professional sports teams are expected to have. These impacts are things that are not so easily measurable, but make cities appear better or worse in terms of their infrastructure or quality of life. Rosentraub identifies a hierarchy of cities based on their infrastructure, size, and cultural relevance; then goes on to suggest that the presence of a sports team could help a city move up in the hierarchy. The belief is that as the city gains a better infrastructure and advances on the hierarchy, businesses will be more inclined to operate in the area. After identifying where sports teams could potentially impact the local economy, Rosentraub goes on to identify whether or not these beliefs are true.

The author concludes that sports teams do have a marginal impact on the local economy, but not to the extent that most people believe. It is concluded that sports teams do benefit the local economy, but not for the reasons that most people believe. Rosentraub (1997) uses the chapter to contradict the notion that professional sports teams are a large portion of a region’s
economy. He uses a table describing the total private-sector payrolls in all counties in the United States, with at least three hundred thousand residents. According to the data, the percentage of sports-related jobs in these counties was less than one percent. Essentially, the author showed that the sports sector makes up a very small portion of a city’s economy. The author then goes on to address the concept of an increase in revenue among related businesses. Evidence shows that “overall payroll dollars associated with the sports sector and with the related spending at hotels and restaurants amount to a very small proportion of any county’s private sector economy” (Rosentraub, 1997, p. 176).

The author continued to support the notion that professional sports teams are beneficial to a city’s economy. He noted that when a team relocates from one city to another, economic gains are far more likely and can be estimated between $10 and $15 million dollars. Furthermore, the author talks about how sports are an important part of any community’s quality of life. While it is unlikely that specifically the presence of a sports team will attract business, it will improve quality of life. In turn, as quality of life improves, infrastructure is likely to improve and therefore businesses are more likely to flock to cities with a professional sports team. The major conclusion from the chapter was that sports teams do positively impact the local economy, but to a much less extent than most believe and for different reasons.

One shortcoming of the article was its failure to recognize the spending that is generated from citizens of other communities. The author deflected the idea of an increase in related spending. Related spending is the concept that when people go to a sporting event, they will also go to a restaurant beforehand or spend money at another business in town. The author argued that had the citizen not gone to the sporting event; they probably would have spent money at
another restaurant. Therefore, the perceived increase in spending is actually just a reallocation of money. But, the author does not consider the concept of new money, which is spending coming from people outside of the city. With regard to professional sports, new money is spent by fans living in neighboring cities, which come to town for the sporting event. The new money would not only be spent on the game or at the stadium, but also at related businesses like restaurants or hotels.

Siegfried and Zimbalist (2006) also explored whether or not professional sports teams can stimulate a local economy in their article about the economic impact of professional sports teams, their facilities and the events they host. The authors take a look at what supporters of a sports franchise expect or estimate the team to do for the local economy, and then compare these beliefs to the true impact, based on economic theory and empirical tests. Siegfried and Zimbalist start the article by acknowledging that supporters expect franchises to have sizable benefits for the local economy. Throughout the article, they show that professional sports teams essentially provide three things for a city: consumer surplus for fans attending games, which slightly improves the quality of life for people living in the city; external benefits for fans that follow the team through the newspaper or by watching on television; and finally a sense of pride for the citizens of the community. At the end of the article, the authors conclude that having a professional franchise may slightly benefit the economy. However, the goals set by people in favor of bringing in a team are never met. As a result, the local government and citizens must carefully take into consideration the very small impact professional sports teams will have on the economy. Ultimately, the authors believe that the presence of a premier sports franchise is not reliable for stimulating the local economy of the city.
The article from Siegfried and Zimbalist (2006) draws many similarities to that of Rosentraub (1997). Both articles recognize the fact that sports teams could have a positive, albeit small, impact on the local economy. The actual impact is almost never the size that is expected by those who support professional sports organizations. The authors all agree that proponents of sports franchises have unrealistic goals in terms of what the team can do for the local economy. At the end of the day, the real impact the sports teams have can never match these expected results. Furthermore, both articles speak at length about the intangible impact these franchises bring to the city. Rosentraub, Siegfried, and Zimbalist all speak at length about how the presence of a sports team can “put the city on the map.” However, it is also noted that there is no evidence showing that businesses are more likely to come to a city with a major sports franchise. In both articles, the authors note that this is highly unlikely. However, the authors differ in how they value the team’s intangible impact on the city.

Siegfried and Zimbalist (2006) differ from Rosentraub (1997) mainly in the way they approach the immeasurable impact a sports team has. In Rosentraub’s article, he values the concept of improving a city’s standing in comparison to other cities. He believes that the presence of a sports team can improve a city’s status, which makes it more attractive to citizens and increases the quality of life. Furthermore, he notes that the city will benefit economically from the positive publicity it receives when holding sporting events and being recognized on television during these events. In the latter article, Siegfried and Zimbalist do not attach any value to this concept. The authors note that there could be some economic benefit from the publicity and increased status as a city, but note that it is very hard to put a dollar amount on these effects. As a result, the authors do not recognize the intangible impact at all. By doing so,
the size of the impact a professional sports team can have is limited to only things with numerical values. This significantly decreases the economic benefit a team can have on the local economy.

The lack of recognition for immeasurable benefits is a major flaw in this article. The intangible impact a city receives could generate at least some economic benefit for the city. For example, a city with a professional sports team is going to gain publicity from hosting televised sporting events. Prior to going to a commercial break, television stations often show different attractions throughout the city. Outside of paying for a sports team, there is no cost the city must pay for these highlights to be shown. After seeing the positive scenes from the city’s urban area, this makes the city a more desirable location for consumers. People from the suburban areas surrounding the city could become more likely to drive into town for a day with their families. Also, people from out of town could be influenced to take their families to the city for a vacation. These are just some examples of how a city could positively benefit from the intangible impacts a sports team has. While these effects are difficult to measure, they should be taken into account.

Walker and Enz (2006) discuss the willingness of the public to pay for sports stadiums through tax dollars in their journal article, which looks at the impact of professional sports teams on Springfield, Massachusetts’ economy. The authors state that public support for professional sports arenas has decreased in recent years, possibly due to concerns about whether or not the franchises impact the economy in a positive manner. The authors discuss three major concepts throughout the article: the size of the sports sector in Springfield’s local economy, the concept of “new money” brought into the community, and the impact of the team’s stadium. The article contradicts some statements made in previous articles examined in the review, namely the size of
the sports sector of the economy. However, the article does relate to Siegfried and Zimbalist’s article (2006).

The authors began by discussing the sports sector of the local economy. Walker and Enz (2006) believe that sports, specifically a professional sports franchise and their stadium, can be unique catalysts for a local economy. The hockey team in Springfield provides multiple jobs for people in the community. By employing many citizens, the employment rate increases and also increases the average wage rate in the city. The authors are suggesting that simply having a professional team helps the economy by employing full-time and part-time workers that otherwise would have to find work elsewhere. Furthermore, the authors argue that having a professional sports team will pump money back into the local economy. Due to the length of the season, most of the players are forced to either rent or buy a house or apartment in the area. The money the players make from their salaries is then being pumped back into the local economy not only for rent expenses, but also for the purchases of other goods. In essence, the players become citizens of Springfield and are then forced to spend money in the local economy. “New money” is also pumped into the economy.

The concept of “new money,” is the idea that revenue will be generated into the local economy that would not have been spent otherwise. In this situation, “new money” would be generated from visiting fans that are coming to see a professional sport that may not be available in their home city. As mentioned previously, a good example of this is citizens of Pittsburgh travelling to Cleveland to watch an NBA basketball game. However, the article also brings up another example of “new money.” The authors also suggest the idea of fans of the visiting team travelling into town to support their team, thus spending more money in the local economy.
Although a very similar example, this is another way that a professional sport team can generate revenue for related businesses, like bars, restaurants or hotels.

Finally, the authors talk about the impact that professional stadiums have on the economy. They note that the presence of a stadium provides revenue-generating opportunities outside of the sports world. Things like concerts or shows become a possibility when a large stadium or arena exists in a city. This provides an opportunity for people who are not interested in sports to spend money in the city, as well as more chances for local businesses to succeed. People are just as likely to spend money at restaurants before a concert as they are before a sporting event. In addition, it is also a possibility that the building of a stadium could be a catalyst for urban development in a city. The presence of a stadium could make certain areas of a city more desirable for travel or business. If a stadium exists, the authors believe it is possible that other buildings or attractions could be built around it. Using the stadium as something to build off could help build up the infrastructure of the city and ultimately help the economy in that area.

Walker and Enz (2006) believe that the sports sector makes up a decent portion of the local economy. The authors note that the presence of a sports team in Springfield provides over 100 full-time or part-time jobs for citizens. In addition, the authors believe that the players will be responsible for helping the economy by using their salaries to pay for rent, as well as to purchase other goods and services. Based on these arguments, the authors believe that a professional sports team could potentially stimulate the local economy. However, Rosentraub (1997), Siegfried and Zimbalist (2006) argue in their own articles that the sports sector of the local economy is much smaller than most people believe. The authors feel that although the
professional franchise could generate jobs, it would not be enough to create any significant
impact on the economy. In response to the notion of players pumping their salaries back into the
economy, Rosentraub argues that players are more likely to spend money in their “home
communities,” that is where they live in the offseason. Furthermore, Rosentraub argues that the
players’ productive lives are shorter than most citizens, and they are not likely to continue to live
in the city in which they played.

Cochran and Lertwachara (2007) use their journal article to expand on research
previously performed on the impact professional sports franchises have on the local economies
in the United States. The authors discuss the ideas originally introduced by authors Noll,
Zimbalist, Baade, and many others. They use their ideas and go more in depth, applying their
own touches to the topic at hand. Cochran and Lertwachara gave credit to the previous authors
for their beliefs about the impact teams have on the local economy, stating that these authors felt
there was little, if any, benefit from having a professional sports team. The authors, however,
noticed that previous researches failed to take into account factors like inflation, causality, the
state of the overall economy, specific characteristics of local areas, and events’ ages. In order to
improve on previous research, and to see if the impact would remain the same, Cochran and
Lertwachara decided to perform an event study, in which they accounted for each of these factors
by accounting for inflation.

The researchers performed an event study to determine the impact professional sports
teams had. Their results were consistent with previous studies, proving that major sports
franchises have no positive impact on the local economy. The empirical evidence suggests that
the estimated local income in cities with at least one professional team was actually lower than
that of a city without a franchise. These results suggest that sports teams potentially have a negative impact on the city’s economy. It is then implied that what the teams generate economically does not justify the incentives that governments use to try and lure teams into coming to the city. As mentioned previously, the authors’ results are consistent with what those have found in the past. However, it could be argued that these findings are more significant, having taken multiple other factors into account.

The work by Cochran and Lertwachara (2007) is very similar to what Siegfried and Zimbalist (2006) found in their research. Both found that the impact of professional sports teams is not what most people expect or estimate. However, Cochran and Lertwachara suggest that the impact is actually negative. What the authors do not account for, like Siegfried and Zimbalist, is the intangible effect that comes from having a professional sports team. Cochran and Lertwachara look at factors with monetary or empirical values, the income per capita of cities with or without a sports team. There are many other factors that go into the local economy that are left untouched in the event study. There is no mention of the real-estate value in the area, which can be used to determine an increase or decrease in the quality of life for citizens. By failing to look at other statistics, the authors fail to account for a potential impact from intangible effects on the economy. While the findings by Cochran and Lertwachara are important and should be considered when debating the impact sports teams have on economies, there are many other factors that should be taken into account.

Authors Baade, Baumann, and Matheson (2008) persuasively portray the ways in which professional sports teams affect the local economy. The authors begin the article by discussing the large estimations that team owners and government officials make when speaking of how the
economy will be positively impacted by professional sports. However, the authors point out that these promoters, often league representatives, team owners, or event organizers, usually have incentive to make these estimations as large as possible. When team owners or league representatives promote the concept of having a professional team, it is possible they are doing so to influence the government officials. If government is in support of a professional franchise, then team owners and the league itself will have to pay less money for stadiums or other expenses. By promoting professional sports through highly estimated economic impact, governments become more inclined to pay for stadiums and offer other incentives to lure professional sports teams into their city. In order to determine the true impact that major franchises have on the local economy, the authors use a regression analysis of taxable sales in Florida over a 25-year period.

Baade, Baumann and Matheson (2008) come to the conclusion that professional sports franchises are just as likely to reduce taxable sales as they are to increase taxable sales. As a result, it becomes more possible that promoters of professional sports are inflating estimations for their own benefit. Thus, government officials and citizens should be wary of the high estimations of economic benefit that team owners and league officials use when promoting professional sports to a city. The findings of this article are very similar to that of the previous article from Cochran and Lertwachara (2007). In both articles, the authors found that professional teams have the potential to be more detrimental to the local economy than beneficial. It is also important to note that the authors both took into account strictly numerical results. In this case, the major indicator of economic success or detriment was taxable sales. In the previous article, the authors chose to look at income per capita as the major teller of whether
or not the local economy was succeeding.

The authors did a very good job of finding important, telling data. By using taxable sales, the data encompassed not only ticket sales, but also the sales of local businesses related to the sports world, regardless of who was purchasing the good or service. The research was also successful in that it looked at the smallest possible breakdown of economies. In other words, the data looked at taxable sales in each county of Florida. This is important because it was data that was legitimately the local economy. It could then easily be traced which teams had more severe impacts on their local economies, something that could not have been done if the data included simply taxable sales for the entire state as a whole.

Authors Groothuis and Rotthoff (2016) discuss multiple concepts dealing with the ability of professional sports to stimulate a local economy. To begin, the authors acknowledge previous research done on the topic. The authors note that previous researches have come to conclusions suggesting that; based on economic output alone, professional sports teams are not reliable to stimulate a local economy. However, the authors go into further detail about the topic. They go on to also recognize authors who have done work relating to the intangible benefits that professional sports teams provide for their cities. The authors discuss at length the concepts of civic pride and ways to give it an economic value.

Groothuis and Rotthoff (2016) recognize civic pride and intangible benefits provided by professional sports teams as things that can help to boost a local economy. The authors give an example of intangible benefits, like civic pride itself, as well as the enjoyment fans and citizens receive from watching local games, having conversations about the team with friends, or reading about the team in newspapers. They go on to identify to methods that are commonly used to give
value to these intangible benefits. The first method, known as the stated preference technique, uses the contingent valuation method. The second method, the revealed preference technique, uses existing markets, like the housing and labor markets, to analyze differences in prices that may reveal benefits created by a sports team. The authors then look at previous research done using these methods.

The authors explain how the results have been mixed when looking at the intangible benefits provided from a professional sports team. The first example given is a study done on the Pittsburgh Penguins, a professional hockey team. The city of Pittsburgh is known for having passionate sports fans, so it is no surprise that the Penguins provide a great deal of civic pride for citizens. However, the amount of pride generated, according to the stated preference technique, was not valuable enough to justify the building of a new arena through public dollars. In a later example, the revealed preference technique was used to justify public spending on NFL teams. Research in the housing market showed higher real estate value, which implied an increase in quality of life significant enough to support public backing of professional sports teams through public dollars.

The article differs from each of the previous articles because of its focus on the intangible qualities a professional sports team provides for its city. While other articles have argued that there are benefits, none have provided methods for placing empirical values on these intangible impacts. This article was successful in showing different ways to analyze the impact professional sports have on a city.

Johnson and Whitehead (2000) focus on the intangible impacts of sports, in their article about two proposed stadiums in Lexington, Kentucky. The authors use the contingent valuation
method to determine the non-economic impacts of sports stadiums. The method is used as a survey to determine what people are willing to pay for the public goods generated by professional sports stadiums. In the article, the authors set out to determine how much people consume the goods generated by public sports, if these goods are valued by people who do not attend sporting events, and the true value of the public goods generated by the sports teams and their stadiums.

In order to put a value on the intangible impact of sports stadiums, Johnson and Whitehead (2000) used the contingent valuation method in the town of Lexington, Kentucky. Citizens were surveyed about two potential sports stadiums in their city, one college basketball arena and one minor league baseball stadium. Early in the article, the authors note that a lot of governments and supporters of professional sports cite the civic pride and public goods generated by teams as good enough reasons to publicly fund the construction of their stadium. The authors chose to focus on two hypothetical markets: the first for a college basketball arena and the second for a minor league baseball stadium. The results for each market were fairly similar. For the basketball arena, the authors surveyed people from Lexington about their private and public good consumption: namely how many Kentucky basketball games they attended and how many games they watched on television. The results showed that, while a small number of people attended games; many more watched more than 10 games on television. The authors continued to discuss the civic pride fans had for Kentucky basketball and found that many of them identified as fans who regularly read about the team, discussed about them with friends, or “claimed they ‘live and die’ with the team” (Johnson and Whitehead, 2000, p. 15). The responses clearly suggested that Kentucky basketball was a large part of people’s lives. However, the
surveyed continued to ask whether or not people would be willing to pay higher taxes in order for an improved basketball arena for the team. The most popular response was that tax dollars should not be spent on a basketball arena, suggesting that, while people value the public goods associated with the team, they would not be willing to pay extra in tax money for an improved stadium. The overall conclusion of the article was that neither the basketball stadium nor the minor league baseball field would generate enough value for public goods to support public financing of the construction of these stadiums.

The article uses the contingent valuation method to determine the intangible impact of sports teams on a local economy. The contingent valuation method is an example of the stated preference technique; one of the two approaches that Groothuis and Rotthoff (2016) use in their article. The approach uses surveys to find out what citizens of a town are willing to pay for a certain good. In both articles, the authors wanted to find out whether or not fans would be willing to pay for the construction of a new arena. Similar to Groothuis and Rotthoff, Johnson and Whitehead (2000) found that the method did not provide enough evidence of a positive intangible impact to pay for construction of a new sports arena.

One major issue with the article is its failure to look at a real scenario. In both surveys, the authors used hypothetical situations, where neither team posed a major threat to leaving the town. It would be interesting to see how the results of the survey changed if there were an actual proposal to build a new stadium. Furthermore, if would also be interesting to see whether or not fans would be more willing to pay for the construction if the teams threatened to move to another city. If the authors were to look at an established team that is considering moving to another city, fans may be more willing to pay for a new stadium. The teams would then have a greater
economic impact on the city because people would have a greater value for the related public goods.

Carlino and Coulson (2004) investigate the true impact of having an NFL team and whether or not it is a good investment for cities to make. The authors focus mainly on whether or not the social benefits outweigh the public financing used to attract the professional franchise. In order to measure the weight of the quality-of-life benefits, the authors use the revealed preference technique. A type of valuation method, the revealed preference technique analyzes the change in price of goods on an already existing market. For this article, Carlino and Coulson chose to specifically focus on the housing and labor markets. The authors looked at the change in rent and wage rate in cities with an NFL franchise. The article concludes by suggesting that when the quality-of-life benefits of having a football team are accounted for, spending public dollars to host a professional franchise is a good investment for cities to make.

Carlino and Coulson (2004) combined the work of their own study with the results of previous studies to come to their ultimate conclusion. The authors began the article by arguing that the social benefits generated by sports teams are measurable. According to the authors, if people are more inclined to live in a city with a sports team, they will pay for it – either directly through buying tickets, or indirectly by paying more for housing in the area. As a result, the study focused on Jacksonville, Nashville, and Charlotte. These metropolitan areas all benefitted from the expansion of the NFL or relocation of franchises. The study looked at rent and wage rates in these cities over a six-year period from 1993 to 1999 and found that, in cities with a professional sports team, rent raised about 8 percent and wage rate decreased by about 2 percent. However, the decrease in wage was not statistically significant, so the authors were not certain
that there is a relationship between wage rate and the presence of a professional sports team. The authors also included the results of another, similar study. Rappaport and Wilkerson (2001) found that the six cities that lost an NFL franchise after 1970 spent more money trying to attract a franchise back to their city than they did when they had a team in the area. The increasing spending suggests that the social benefits associated with an NFL team may be enough to justify the large public expenditures. The authors used the results of both studies to come to their ultimate conclusion. When quality-of-life benefits are included with economic benefits of hosting a professional sports team, the amount of public dollars used to finance professional sports stadiums is justifiable.

Carlino and Coulson (2004) used the second of the two valuation methods described by Groothuis and Rotthoff (2016). As mentioned previously, the revealed preference technique looks at the change of price for goods in an already existing market, like the housing or labor markets. The valuation approach led the authors to different results than most of the previous studies. One possible reason is because of the willingness for the authors to account for the social benefit of having a professional sports team. Most previous studies focus solely on the economic results and fail to account for an increase in the quality-of-life. In addition, the authors also use legitimate, recorded data. Other studies looking at the social impact have used hypothetical scenarios in which citizens are asked to say how much money they would be willing to spend on a sports team. While the data from these hypothetical scenarios is important and offers many valid conclusions, it is reasonable to believe that if the situation were to become a reality, the results would be different.

One interesting aspect of the article was its interest in focusing on sports teams with only
one professional franchise. The study focuses mainly on three cities: Jacksonville, Nashville, and Charlotte. At the time the study was performed, two of the three cities only hosted one NFL franchise. The impact in these cities could be more or less significant than in other cities because sports fans would have no other team to cheer for. As a result, they could value the franchise in their city more and be willing to spend more money to live in the area. For the study to be enhanced, it would be beneficial to look at the impact on a city with only one franchise and compare it to that of a city with multiple organizations.

Rappaport and Wilkerson (2001) noticed an increase in competition among United States cities to attract professional sports franchises. With the increased competition, the authors also noticed that proponents of professional sports frequently justify the decision to publicly finance the construction of stadiums by suggesting a sizable, positive economic impact for the city, through job creation and tax revenue. However, multiple studies have disproved this idea. The resulting debate is whether or not using tax dollars to attract professional organizations is the best allocation of resources. The authors argue that simply looking at the economic impact does not provide enough information to answer the question. The authors look at the social benefits generated by professional sports, using three different valuation methods.

Rappaport and Wilkerson (2001) first used the contingent valuation method by examining a study previously performed on the city of Pittsburgh. Citizens were asked how much they would be willing to pay to keep the Penguins from relocating to a new city. The results showed that the amount of money fans would be willing to spend, at best, more than $10 million less than the average amount of money spent on a new NHL stadium; suggesting that the increase in quality-of-life from a professional hockey team was not enough to support public
financing for the team. However, the authors explain that the study may not have been the most
telling. Professional hockey has the smallest fan base in the United States among the four major
sports and Pittsburgh has multiple other professional sports franchises. Therefore, the citizens of
Pittsburgh most likely have less value for their team than fans in other cities.

Second, Rappaport and Wilkerson (2001) discuss the revealed preference technique,
which focuses on housing and labor markets. The theory behind this valuation method is that
cities with a better quality-of-life will have greater population inflows, which will ultimately
increase rent and decrease wage rate. To help explain, the authors noted that the increase in
quality-of-life from one extra day of better weather for 30 years has a dollar amount that is
similar to what is spent, in tax dollars, on professional sports stadiums. Studies show that better
weather increases quality of life, which therefore raises housing prices and decreases the wage
rate. The authors state that it is difficult to put a dollar amount on how much sports teams
increase quality of life because of the sizable populations and variety of factors that could affect
wage and housing prices. However, the authors argue that if fans are willing to endure extreme
weather conditions to watch their team play, then it is reasonable to assume that they prefer
sporting events to sunny weather.

Finally, Rappaport and Wilkerson (2001) talk about the actions of cities that have lost
professional sports teams in the past. Since 1980, 12 major franchises have relocated to different
cities: six teams from the NFL, four teams from the NHL, and two teams from the NBA. After
one of the NFL franchises left, all but one city drastically increased spending in an attempt to
attract a new team. The example provided is the case of St. Louis. Prior to the departure of the
NFL’s St. Louis Cardinals, voters refused to allocate $120 million to a new stadium for the team.
Less than three years after the team moved, voters approved $280 million of public funds for a new stadium, despite not even having a team to play there. In the NHL and NBA, the results have been mixed. Some cities have been far more willing to spend money to attract a new team, while others have spent far less or none at all. Overall, the decisions of metropolitan areas to spend large amounts of money to bring a franchise back support the notion that the increase in quality of life is enough to justify public spending for professional sports teams and stadiums.

Rappaport and Wilkerson (2001) use many of the same concepts as Groothuis and Rotthoff (2016), but add another element. In both articles, the authors talk at length about the social impact of professional sports franchises and whether or not they improve the quality of life in their city. The authors devote a great amount of their work to the contingent valuation method and the revealed preference technique, but Rappaport and Wilkerson give an additional approach to valuing social benefits: by looking at the actions of consumers in similar scenarios. In this case, the cities that lost professional sports teams represent the consumers. The authors argue that this method may be the most successful because the cities have experienced life with and without a sports team. Therefore, they are able to properly value the increase in quality of life that results from having a professional franchise in town.

The article could have been improved with a better application of the revealed preference technique. Rappaport and Wilkerson (2001) use a study on how much the quality of life is improved from an extra day of good weather, but fail to include a similar study showing the improvement as a result of a professional sports team. It is noted that the large population of the cities would make it difficult to determine whether or not the increase in rent or decrease in wage was from the presence of a major league sports organization or from other facts. However, if a
very similar study can be performed looking at the effects of good weather, then it is reasonable
to expect the same to be done with respect to professional sports.

Johnson, Whitehead and Groothuis (2001) apply the contingent valuation method to the
city of Pittsburgh and its relationship with the Penguins. The authors use the relationship
between the team and its fans to answer whether or not it is appropriate to spend tax dollars on
the construction of a new sports arena. The results of the study suggest that professional sports
do generate public goods, like civic pride and community spirit. The authors acknowledge that in
some situations, the value of said public goods could be enough to justify publicly financing the
construction of new facilities. However, in the case of the Penguins, the value of the generated
public goods did not exceed the average cost of a new stadium.

Johnson, Whitehead and Groothuis (2001) generated a survey, which was given to the
city of Pittsburgh. After a brief section about professional football and baseball in the city, the
survey shifted its focus to hockey. The second part of the questionnaire focused on the public
good generated by the Penguins. Fans were asked whether or not they identified themselves as
Penguins fans and how often they consumed the Penguins’ product – their games – either by
attending games, watching on television, or discussing the team with friends, coworkers and
family. The results of this section of the survey strongly suggested that the Penguins generated a
public good for the citizens of Pittsburgh. Over 70 percent of people living in Pittsburgh
identified themselves as Penguins fans, despite 40 percent of people not having attended games.
The next section of the survey provided the fans with a hypothetical scenario. At the time of the
study, the franchise had just been sold to a new ownership group, who was pondering relocating
the team to a new city. The people being surveyed were given one of two alternatives: either the
team relocates or help pay for new facilities through public tax dollars. The total amount of money fans were willing to spend on a new stadium did not reach or exceed the average amount of a new NHL stadium at the time. The results of the survey suggest that, in the city of Pittsburgh, the value of civic pride and community spirit generated by the Penguins did not exceed the cost of a new stadium. The authors did include some caveats that exist within the study. First, the NHL is the least popular of the four major sports leagues in the United States, so it is reasonable to think that teams would not generate nearly as much revenue as those in other major sports leagues. Second, the authors acknowledged that the results in Pittsburgh may not be the same for every city. The fans may value the public goods generated from the teams in their metropolitan areas more or less than the fans in Pittsburgh.

The article takes an exclusive look at the contingent valuation method. Johnson, Whitehead and Groothuis (2001) go into great detail about the method they used, clearly describing the survey used, questions asked, and results received from the citizens of Pittsburgh. The data results have commonly been used in studies about the intangible impacts of professional sports, many of which have been featured in this literature review. Finally, the article also acknowledges and gives credence to work previously done on the economic impact of professional sports. The authors note multiple times early in the article that the economic impact of major league sports franchises is not sizable enough to justify publicly financing the construction of new stadiums or arenas.

The article uses a hypothetical scenario as the basis for the survey. It would be very interesting to look at a scenario where the team has already left and see what fans would be willing to pay to bring the franchise back. The authors (2001) put together a very robust and
important survey, however it is hard to tell what the true reaction of the fans is based off of a hypothetical scenario. The article was successful in identifying the presence of a public good generated by sports teams, but could have been improved by looking at a real life situation.
Chapter 3: Theoretical Chapter

This research is being performed to determine the impact of professional sports franchises on their local economies. More specifically, do these franchises have enough of an impact on the economy to justify the large amounts of public taxation often required to pay for a team? This chapter will present a theoretical economic framework related to the goals of the paper. Many of the articles discussed in Chapter 2 revolved around a similar topic: how profitable are professional sports organizations for cities? Most of the literature agreed that, while proponents of professional sports often estimate teams will generate hundreds of millions of dollars in revenue, authors and researchers have found the impact to be far less significant. One of the most commonly cited reasons for this was due to a lack of new revenue being brought into the economy. Instead, researchers believed consumers were simply spending the same amount of money on other goods, not any more or any less. In other words, consider a consumer choosing what way to spend their disposable income for entertainment purposes. The consumer has the option to choose to spend money on any number of entertainment options. With the arrival of a professional sports team, the consumer is still going to spend the same amount of money. While the revenue the team generates may appear to be very high, it is the same money consumers would be spending on entertainment activities prior to their arrival. The key concept in this scenario, which was examined by most of the articles from the previous chapter’s literature review, is the idea of consumers dealing with budget constraints.

The basic premise behind a budget constraint is that consumers are limited in the combinations of goods they are able to purchase. Disposable income and the price of goods are
both determinants in how much of a certain good a consumer can purchase. A key factor in this concept is the budget line. The budget line provides all combinations of goods a consumer can buy if they plan on using all of their disposable income. Obviously, the consumer does not have to use all of their income, and can therefore purchase any combination of goods on the budget line or inside of the budget line. The line is altered by the price of goods and the consumer’s income. As consumer income increases, the budget line makes a parallel shift outward, giving the individual the ability to purchase more of each good. Conversely, if income decrease, the budget line makes a parallel shift inward and the consumer has less purchasing power. On the other hand, a change in the price of a good alters the slope of the budget line. An increase in the price of one good means that for a consumer to spend all of their disposable income, they must purchase less of it and more of another good. The opposite is true if the price of a good decreases. In order to utilize all of their disposable income, the consumer must purchase more of the good that decreased in price, and less of another good (Baumol, Blinder, 2009, Pgs. 100-101).

In order to understand the concept and how it relates to the research, consider a consumer with only $20 of disposable income. Now, assume the consumer wants to spend all $20 in order to receive some level of entertainment. Lastly and for simplicity purposes, assume the consumer only has two options to spend their money on: going to the zoo for a day or attending a professional basketball game. The price of admission to each of these events is also $20. The consumer’s budget constraint in this scenario says that they can only purchase one of these tickets. However, if the consumer’s income increased to $40, they would then have the ability to attend each event, purchase two tickets to one event, or only purchase one ticket for one of the
events and save $20. The same is true if the price of a ticket for either the zoo or the game decreases to $10. The consumer would then have more options for how they would choose to spend their money.

The argument presented in many of the articles reviewed in Chapter 2 was that, while professional sports teams generated a large amount of spending, it was simply a shift in consumer spending, as opposed to new revenue. In other words, budget constraints limited the impact professional sports teams were able to have on their local economies, in terms of spending. While professional organizations certainly receive a lot of money from consumer spending, previous researchers argue that other industries are negatively affected. A consumer’s budget constraint forces them to choose between attending a sporting event and other entertainment options. Often as a result, especially in sports driven towns like Boston and Pittsburgh, consumers will choose to attend a sporting event, which ultimately makes it appear as though professional sports have a drastic impact on the local economy.

**Figure 3.1: Budget Constraints**
Figure 3.1 above illustrates the example previously discussed in the chapter. The budget line for a given consumer is on display. The price of both goods, a game ticket and a ticket to the zoo, is $20. The consumer’s income is $20 as well. The budget line illustrates all possible ways for the consumer to spend their money. Any bundle on the consumption line, or inside of it, is a possibility for the consumer. In the example, the individual is limited to two ways to spend their income: either entirely on a ticket to go to the zoo or a ticket to go to the basketball game. As mentioned previously, a change in consumer income or a change in the price of either good would alter the budget line. Suppose consumer income would increase to $40. The budget line would make a parallel shift outward, thus giving the consumer more ways to spend their income. Additionally, a change to the price of either good would also affect the budget line. Consider a decrease in the price of a ticket to the basketball game, from $20 to $10. As a result, the budget line would meet the x-axis at two tickets. The consumer would then be able to purchase either two tickets to the basketball game, one ticket to the zoo, or some other combination depicted in the figure.

The figure helps to explain why the supposed new revenue that sports teams generate is the same as any other entertainment exercise. The example assumes that consumers only have two options when it comes to spend their money. While this is somewhat extreme, in every city there is a limited number of entertainment options on a given night. As a result, consumers must choose how they would like to allocate their resources. In cities with multiple professional sports teams, fans often must choose which franchise they would like to spend their money on. However, in cities like Oklahoma City, where only one professional sports team exists,
consumers face a different choice. Instead of choosing between the Thunder and another professional sport or another franchise, consumers in Oklahoma City and its surrounding areas face a situation similarly to the example depicted in Figure 1 above. Fans must choose between a limited number of entertainment options, one of which is often attending a Thunder game. As a result, the amount of money the organization claims to generate for the city is often skewed. The figure above shows that consumers have limited options. Therefore, while people are spending money to watch the Thunder play, they are not spending money on other entertainment activities. In other words, the Thunder, and other professional franchises, are not necessarily generating any new money to the local economy. Instead, the franchises are simply creating a change in how consumers are choosing to spend their disposable income.

While franchises are simply shifting how consumers decide to spend their money, they can impact the local economy in other ways. Professional teams often attract fans from surrounding cities. Consider the Oklahoma City Thunder. While located in Oklahoma City, the basketball team is the only professional sports organization in the entire state of Oklahoma. As a result, the team attracts fans from surrounding cities. It is reasonable to assume these fans from other cities would not be spending money in Oklahoma City if it were not for the presence of the Thunder. Furthermore, Thunder fans from Tulsa, Norman, Stillwater, or other cities throughout the state are likely to pay money for things other than tickets. Often, these fans will pay for a hotel room and at restaurants outside of the arena. In order to truly impact the economy from a spending standpoint, professional franchises should target fans from neighboring cities. Doing so will bring new money into the economy, revenue that would not have been created without the presence of the organization. In other words, by simply selling tickets to fans living in the
Oklahoma City metropolitan area, the Thunder are simply shifting how consumers in the area spend their disposable income. However, by attracting fans from other cities, the organization would be bringing in money from consumers who would not normally spend their money in the area on local businesses.

In addition to creating a market for citizens from other cities, professional franchises can improve their local economies by improving employment and GDP in the area. The arrival of franchises brings in potential job opportunities for citizens within the metropolitan area. Whether it be through construction of the arena, working in the arena, or working for the organization itself, citizens have multiple opportunities for employment in the city. Furthermore, the presence of the organization is likely to generate business for local restaurants, bars, hotels or retail stores. In response to the increased business, it is likely owners will need more help and more employment. Finally, GDP is one of the best indicators of economic success. The presence of a professional franchise has the potential to increase GDP in a metropolitan area, therefore boosting the local economy.

The concept of budget constraints is a major factor when determining the economic impact of a professional sports franchise. While teams and organizations often estimate they will boost the economy through increased spending, budget constraints explain that the belief may not be true. While spending is very high on professional sports teams, consumers have a decision to make when determining how to spend their disposable income. As spending on professional sports increases, spending on other entertainment options decreases. Instead of creating an increase in spending, professional sports franchises simply generate a shift in how consumers are willing to spend their money. However, there is more than one way to have an economic impact
on a city. While spending may not necessarily increase, professional sports franchises have the potential to increase employment in GDP in their local cities.

**Chapter 4: Empirical Chapter**

In order to get a general idea of the economic impact the Thunder have on Oklahoma City, various economic indicators for the metropolitan area were examined. Data on the economic climate of Oklahoma City featured several variables, including population, employment figures, and per capita real GDP numbers. The figures for each of these variables were collected from 2001 to 2015. The wide time frame allows for analysis of Oklahoma City’s economy prior to and after the arrival of the Thunder. By looking at the years prior to the team’s inaugural season, it becomes easier to suggest if the team truly had any effect on the city’s economic climate. The data on Oklahoma City’s economy was collected from the Bureau of Economic Analysis.

Data was also collected on the attendance numbers for the Thunder each year of the team’s existence in Oklahoma City and on the average ticket prices for regular season games. These statistics provide insight to the popularity of the organization in Oklahoma City. By reviewing these figures, one can assume that the Thunder continue to become more popular, which could potentially lead to an increase in spending for local businesses in the Oklahoma City
area. The Thunder’s attendance rates and average ticket prices were found using Statista, through espn.com and Team Marketing Report.

4.1: Attracting a Franchise and Increasing Popularity

The Thunder are responsible for a great deal of economic spending in the Oklahoma City metropolitan area. On top of ticket sales, fans of the team frequently spend money in nearby bars and restaurants, where they can watch games, as well as, in clothing stores for apparel and team-related clothing items. In addition, citizens from outside of the city are consistently attracted into town, where they will spend money on a hotel when staying for a game. However, prior to the Thunder’s arrival, public spending was spent for an arena and in order to attract a team. In the early 1990s, a redevelopment initiative, known as Metropolitan Area Projects (MAPS), was proposed in the Oklahoma City area. Voters approved a one-cent sales tax to be extended over five years, but was eventually extended for another six months. After its completion in 1999, the sales tax generated over $309 million in profits to be used for the construction of nine projects in the Oklahoma City area. The nine projects included the Ford Center (future home of the Thunder, later renamed Chesapeake Energy Arena), a library, a convention, and multiple other buildings, aimed for redevelopment of the downtown area. Construction of the Ford Center was completed and the stadium opened in 2002. However, the NBA franchise would not arrive in Oklahoma City for six more years. Prior to the team’s arrival, renovations to the arena were required in order to attract a full-time NBA team.

In March of 2008, just one month before the announcement that the city would receive an NBA organization, Oklahoma City voters again approved a one-cent sales tax. The new tax would extend over 15 months and generate enough money to cover improvements to the Ford
Center, as well as pay for the construction of a brand new practice facility for the team.

Ultimately, the tax generated $121.6 million. Of the tax revenue, $97 million went to upgrades, while the remaining $24.6 million went to the construction of a practice facility. The renovations and additional construction were important for receiving a professional sports organization. By improving upon the Ford Center, owners of the Seattle SuperSonics were attracted to Oklahoma City. Beginning with the 2008-09 season, the Oklahoma City Thunder were officially an NBA organization.

Attracting a professional franchise was step one for improving the Oklahoma City economy. The Thunder’s presence provided a major opportunity for increased spending throughout the metropolitan area, as well as the state. However, the team’s popularity is a major factor, in terms of how much the economy will be affected. The more popular the franchise, the more money that will be spent on tickets, concessions, and apparel.

In order to get an idea of impact a professional sports team has on their local economy, the Oklahoma City Thunder will be taken into account. Oklahoma City has a small to middle-sized population and is one of the smallest markets in the NBA. As a result, there are far less factors that can influence economic success than in a market like Los Angeles or New York City. By focusing on a metropolitan area with a population the size of Oklahoma City’s, one can say with more certainty whether or not the professional franchise in that town has a positive, negative, or neutral impact on the local economy. Furthermore, the Thunder are the only professional franchise present in Oklahoma City. Without having to compete with other teams for support, the Thunder dominate the sports and entertainment landscape not only in their city, but also in the entire state of Oklahoma. As a result, it will be easier to identify the true potential
a sports team has to impact a local economy.

The data taken into account spans the years from 2001 to 2015. The indicators in this era provide a glimpse of the economic conditions leading up to the Thunder’s inaugural season in 2008. By examining the economy from 2001 until 2008, we are able to see the trend in the various statistics taken into account by the study. With that information, one can determine whether or not the results after the Thunder’s relocation were due to the team’s arrival or simply just a continuation of the common trend. Obviously, data from 2008 until 2015 must be included in order to get an idea of the city’s current economic state. Additionally, the time range accounted for provides a similar sample size for both scenarios: prior to and after the Thunder’s arrival. Lastly, the improvement of the team is another major factor for the size of the time frame. In the organization’s inaugural year in 2008, they were among the league’s worst. However, the team rapidly improved and has become a consistent playoff team and a contender for the NBA title each year. As the Thunder have improved over the years, the excitement and support from the fan base has steadily increased. Recently, the team has become increasingly popular and seen an increase in ticket sales and overall revenue. The increased success of the franchise certainly could play a role in their impact on the local economy.

Figure 4.1: Oklahoma City Population
Prior to looking at the economic climate of Oklahoma City after the Thunder’s arrival, it is important to see the city’s state in the early 2000s. Looking at various economic indicators from 2001 to 2008 makes any potential trends easily identifiable. As a result, it is far easier to determine if the Thunder have any true impact on the local economy, or if it is continuing to progress as it would without a professional franchise. If there are any drastic changes, whether they be positive or negative, they potentially could be related to the arrival of the organization.

The first statistic examined is population. The figure above shows that Oklahoma City has seen a steady increase in its population every year since 2001. As is evident, there has never been a significant change in the rate at which the city is growing. While it is highly unlikely that the presence of a professional organization would stimulate the growth of a population in a city, the idea is confirmed by the data presented below. Therefore, one can say with a high degree of certainty that the increase in population from 2008 through 2015 is simply as a result of a trend in Oklahoma City’s population. However, it is important to note that the increase in population will have an effect on other statistics represented in the study. As the population increases, numbers for total employment, total earnings and total personal expenditures will also increase. This is due to the fact that there are simply more people living in the city, thus greater opportunities for jobs, to make money, and to spend money. In order to adjust for these deficiencies in the data, it is important to look at the statistics for each individual industry. By doing so, one can determine which industries have the greatest impact on the overall statistic, based on percentage. If the industries directly impacted by a professional sports organization have a higher percentage of employment, earnings, or consumer expenditures, then the Thunder
are likely to have at least some impact on the local economy.

<table>
<thead>
<tr>
<th>Year</th>
<th>Regular Season Attendance</th>
<th>Average Ticket Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>747,732</td>
<td>$36.35</td>
</tr>
<tr>
<td>2009-10</td>
<td>738,149</td>
<td>$45.99</td>
</tr>
<tr>
<td>2010-11</td>
<td>744,068</td>
<td>$45.99</td>
</tr>
<tr>
<td>2011-12</td>
<td>600,699</td>
<td>$47.15</td>
</tr>
<tr>
<td>2012-13</td>
<td>746,323</td>
<td>$47.15</td>
</tr>
<tr>
<td>2013-14</td>
<td>746,323</td>
<td>$51.35</td>
</tr>
<tr>
<td>2014-15</td>
<td>746,323</td>
<td>$51.35</td>
</tr>
</tbody>
</table>
Figure 4.2: Thunder Popularity

In addition to the population trend, it is important to understand the Thunder’s popularity among its fan base. Despite being the third smallest market in the NBA, Oklahoma City fans have shown loyalty to their organization. Figure 4.2 above shows the attendance for Thunder regular season, home games since their inaugural season in 2008-09, as well as the average ticket price for these games. The chart shows that the team has reached the attendance limit in every season since 2010-12, which was shortened due to a player lockout. While seeing highly successful attendance levels every year, Thunder management decided to slightly, but steadily raise ticket prices every two years. Since their first season in Oklahoma City, the average ticket price to attend a Thunder game has increased from $36.35 in 2008-09, to $51.35 in 2014-15. Despite the increase in price, fans continue to attend games. The support is likely due to the rapid success the organization has been a part of it. The Thunder made the NBA playoffs in 2009-10, improving from a 13th place finish in the Western Conference the year before. In 2011-12, the organization made its first trip to the NBA Finals and continued to make the playoffs and be a constant contender in the Western Conference in the following years. Based on ticket sales alone, the Thunder have generated massive amounts of revenue from people in Oklahoma City and other nearby cities. Using the average price of tickets and the total attendance in 2013-14, we can estimate that the Thunder made $38,323,686 in the regular season alone. The estimate fails to consider the money made on tickets sold for playoff games, apparel or concessions bought inside Chesapeake Energy Arena. The projected revenue alone describes the interest people in Oklahoma City have for the organization. As a result, fans stay interested and use the team as a
leisure activity and a way to receive some level of utility in their lives.

The numbers generated from ticket sales alone show that going to see a Thunder game is a viable entertainment option for Oklahoma City citizens. In addition, the organization is the only professional sports franchise present in the state of Oklahoma. As a result, the team likely dominates the sports, and social, landscape in the state. Everywhere fans are likely to have conversation dealing with the team, as well as, massive amounts of media coverage. The people living in Oklahoma clearly enjoy going to watch their team play, as well as watching them on television, reading about them in the newspaper, and talking about the team with friends and family. As a result, the Thunder clearly have a positive impact on the quality of life for people in Oklahoma. By giving them some kind of enjoyment, they are improving people’s lives, which represents the intangible impact of professional sports. While quality of life is increased through the organization’s presence, the Thunder also are likely to impact businesses and industries related to professional sports. Consider attending a sporting event. To go to the game, one often must pay for parking, then will usually find a restaurant to eat at before or after the game. In addition, multiple other businesses see increased revenue through apparel sales.

4.3: Effect on Employment

One of the main arguments people in favor of professional sports organizations use is their projected impact on the local economy. As mentioned previously, the Thunder generate a great amount of spending in Oklahoma City and the surrounding areas. However, people argue that the organization provides more than just increased spending to a metropolitan area. A common belief is that the presence of a team will increase employment throughout the
city. The presence of an organization is believed to create a multitude of job opportunities for a city. Not only do positions within the organization itself become available, but employees are also required at the arena to work home games and other events. Furthermore, the team’s presence generates more business for multiple other industries. During the season, bars, restaurants, hotels, and clothing stores, among others, all see the amount of business they receive increase. As a result, more help is required to successfully fulfill the needs of consumers. In turn, more jobs could potentially be created for citizens.

Figure 4.3: Oklahoma City Employment

Figure 3 above shows overall employment in the Oklahoma City metropolitan area from 2001 to 2015. The employment statistic takes into account all part-time or full-time jobs. Wage
and salary jobs, sole proprietorships, and individual partners are included, but not volunteers or
unpaid family workers. Again, it is important to note any trends in employment prior to the
Thunder’s arrival in 2008. During the pre-Thunder era, employment in Oklahoma City was on
the rise. After peaking in 2008, employment dropped significantly but is again on the rise. The
Ford Center, the future home of the Thunder, was completed in 2002 and immediately began
hosting entertainment events. The stadium played host to multiple concerts, college and
professional sporting events prior to 2008. Each of these events required employees, which were
included in the study. The construction of the Ford Center, as mentioned previously, was a part
of the MAPS redevelopment project in Oklahoma City. As a result, it can be argued that the
increase in employment from 2002 to 2008 is directly related to the project. Although the
Thunder were not yet present in Oklahoma City, the same concept can apply to the team’s
arrival. From 2009 to 2015, employment in the area increased each year, ultimately topping
850,000 total jobs. The increase in employment runs parallel to the popularity and success of the
organization. As the number of jobs in Oklahoma City increases, ticket sales and team
performance do as well. First, as the Thunder became a more popular ticket in Oklahoma City,
business around the city increased as well, which could result in a need for more jobs.
Furthermore, as the team became more successful, they played more games in the playoffs each
year. With more games being played, more opportunities for business arise. Ultimately, it is
reasonable to believe that the presence of the Thunder had a positive impact on the total number
of jobs in Oklahoma City. As for the decrease in employment from 2008 to 2009, the country
was going through a recession at the time. As a result, over eight million jobs were lost and
unemployment rates soared across the country. While overall employment in Oklahoma City
increased after the arrival of the Thunder, it could be a result of other factors. In order to get a better idea of the impact of the organization’s presence on employment, it is important to look at the employment totals for each industry, as defined by the United States Bureau of Economic Analysis.

As of 2015 in the Oklahoma City area, the arts, entertainment, and recreation industry accounts for less than two percent of all jobs. While the percentage of employment has increased from 1.53% in 2001 to 1.85% in 2015, the overall number of jobs in the industry is still very low. Furthermore, employment in the industry one year prior to the Thunder’s arrival, 2007, was 1.71% of the city’s total employment. After an initial decrease from 2007 to 2008, the number has increased steadily until 2015. The trend in industrial employment suggests that the presence of the Thunder has impacted employment in Oklahoma City, although very slightly. Since the team’s arrival, total employment in the city has increased, a trend that appeared to be plateauing prior to the organization’s inaugural year. However, the increase in employment in the entertainment and recreation industry is very slight, which suggests that while there may be some sort of positive impact, it is very small. It is reasonable to suggest that the increase in employment is partially influenced by the Thunder’s arrival, however multiple other factors, like an increased demand for oil extraction, probably play a more significant role.

4.4: Effect on GDP

Gross Domestic Product (GDP) is one of the best measures of economic stability and success in a metropolitan area. A high GDP in a city represents a strong and successful economy. If the presence of a professional sports team is believed to improve the local economy, then it is likely to also have an impact on the area’s GDP. As with employment, the statistic can be broken
down into multiple different industries. The effect of professional sports on the GDP of the entertainment, food, accommodations, and retail industries have significant roles in whether or not the franchise truly has an impact on the city’s economy. In Oklahoma City and its surrounding area, current and previous trends in GDP could be very telling of the Thunder’s impact on the local economy. Previously examined information shows that while the team may have a positive impact, it is likely to be very small. A close look at GDP could give insight as to whether or not the Thunder have any significant impact on Oklahoma City’s economy.

**Figure 4.4: Oklahoma City per Capita Real GDP**

![Graph showing Oklahoma City's per capita real GDP from 2001 to 2015](image)

Figure 4 above shows Oklahoma City’s per capita real GDP, from 2001 to 2015. The
general trends in the statistic are important to note to capture an idea of what the city’s economy is like. Since 2001, GDP has increased to top 50,000 dollars. From 2001 to 2006, per capita GDP consistently increased. However, the city saw a decline from 2007 until 2011, when it saw a jump. Since, the city has seen economic success and GDP continues to rise. There are several possible explanations for these trends. First, from 2001 to 2007, Oklahoma City was reaping the benefits of its redevelopment project. Around this time, several buildings in the metropolitan area were completed, which helped spur economic development and spending in the city. One of the major projects that was opened during this time period was the Ford Center. As mentioned previously, the Ford Center hosted multiple concerts, collegiate and professional sporting events prior to the arrival of the Thunder in 2008. As a result, the building likely caused an increase in spending in Oklahoma City bars and hotels when it would host events. However, the economic benefits it provided cannot be attributed to the Thunder, obviously, because the team was not in the city. As for the decline in GDP from 2007 to 2011, the Great Recession of the time period likely had an impact. After a burst in the housing bubble, the entire country went into an economic recession. Most, if not all, cities were hurt drastically. The recession led to a loss of over eight million jobs across the country. While the recession finally came to an end in 2009, it took many cities years to recover. Oklahoma City’s sharp increase in GDP in 2011 suggests that the city was finally getting over the troubling time and beginning to get back on track financially. As for the Thunder’s presence, the team’s arrival in 2008 appears to have done very little to spur immediate economic success for the city. However, once the team began seeing more and more success, making the playoffs and advancing further each year, the city’s economic state began to increase. Before coming to conclusions about the team’s true impact on the local economy, it is
important to note the impact each industry had on real GDP during the time period.

As mentioned previously, professional sports impact the entertainment, food, accommodations, and retail industries. Fans often spend money not only on tickets for games, but in restaurants to watch games on television and on team-related clothing. Furthermore, fans from other cities will often spend nights in hotels when coming to see the Thunder play. As a result, the GDP for each of these industries is impacted by the organization’s presence. The Bureau of Economic Analysis separates each of these types of businesses into two major industries: Arts, Entertainment, Recreation, Accommodation, and Food, as well as, Retail Trade. Since 2001, both industries have seen an increase in GDP.

**Figure 4.5: Oklahoma City real GDP by Industry**

![Graph showing real GDP growth by industry from 2001 to 2015](image)

Figure 5 above shows real GDP for each of the two previously mentioned industry. The data stretches from 2001 to 2015 and shows that each industry has seen an increase in GDP since 2001. The trends present in the table show that GDP for each industry typically increased from
2001 to 2006, prior to a brief decrease from 2006 to 2008. Again, it is important to recognize the presence of the Ford Center in 202, which played a major role in the redevelopment of the Oklahoma City metropolitan area. However, after the Thunder’s inaugural season in 2008, both industries saw a somewhat rapid increase in GDP. It is reasonable to assume that the team’s presence brought an increase in spending on not only ticket sales, but also in restaurant and hotel expenditures. Furthermore, the same can be suggested for the retail industry. The team’s presence, and subsequent success, could account for an increase in demand for clothing, which would account for a rise in GDP.

Chapter 5: Conclusion

5.1: Project Summary

The research performed attempted to find a value for the economic impact of professional sports teams on the local economy. While multiple similar studies have been done in the past, there is a lack of research on cities with only one professional franchise. As a result, the research performed is a case study of the economic impact of the Oklahoma City Thunder, of the National Basketball Association (NBA), on their local economy. Empirically, the study looked at various statistics related to the Oklahoma City metropolitan area’s population and economy, as well as the overall popularity of the team in the area. The data retrieved for the article covered a fifteen-year time span, beginning in 2001 and ending in 2015. The selection of Oklahoma City was imperative for the conduction of the research. The Thunder did not arrive in Oklahoma City until 2008, making the 2008-2009 NBA season their inaugural year. As a result, the analyzed
data provides two different time periods that are similar in their length. From 2001 to 2008, Oklahoma City was without a professional sports franchise. This time period allows us to identify any previously established trends in the analyzed statistic. From 2008 to 2015, the Thunder were in town and we can identify any trends that may have resulted from the arrival of the franchise. Additionally, it is important to look at the trends of both time periods. If there are any drastic changes to the relevant economic indicators, then it is reasonable to assume the Thunder had an impact on these statistics, and thus the local economy.

From a theoretical standpoint, it is important to note the relevance of budget constraints before suggesting any economic impact from a professional franchise. Budget constraints help to suggest that professional sports franchises do not generate as much “new money” to the economy as many proponents of the organizations suggest. Instead, the franchises simply create a shift in how consumers in Oklahoma City, and other metropolitan areas, spend their disposable income for entertainment purposes. However, this is not to say that budget constraints suggest there is no economic impact from professional sports team. Franchises still have the ability to attract fans from other cities, which would generate new money for the economy. Additionally, the opportunity to increase employment in the area, as well as improve the city’s GDP, still exist and should be considered.

5.2: Results and Analysis

After analyzing multiple statistics relevant to Oklahoma City’s population and economy, as well as the popularity of the Thunder, it is difficult to tell the true economic impact of the franchise. One can say with a fair amount of certainty that the franchise does not generate the hundreds of millions of dollars that many people project. The concept of budget constraints
restricts the amount of “new money” generated by the Thunder organization. However, the impact the team had on employment figures and GDP for the Oklahoma City area provides reason to suggest that the team does provide some positive impact to the city’s economy.

The data spanning 2001 to 2015 provides insight to two separate time periods of the Oklahoma City economy. From 2001 to 2008, the city was without a professional sports team. The statistics provide insight to any trends that may continue after the arrival of the Thunder. From 2008 to 2015, the Thunder had arrived and began to impose their impact, real or imagined, on the city. The trends in economic statistics from this era provide insight as to how large of an impact the organization had, if any. The major statistics taken into account for the study were the population of Oklahoma City; the attendance numbers and average ticket prices for Thunder regular season games, through the 2015 season; the overall employment figures in Oklahoma City; the employment figures, broken down by industry in Oklahoma City; the per capita Real GDP in Oklahoma City; and the Real GDP, broken down by industry in Oklahoma City.

Population in the metropolitan area increased steadily throughout both time periods. The lack of a significant increase or decrease suggests that the Thunder had no impact either way on the population of the town. However, the increase in attendance for Thunder games show an increase in the team’s popularity. The organization continued to sell out games regularly, despite increasing the average price of a ticket for a home game. The increase in popularity shows that fans were interested and willing to spend money on the organization. Although the idea of budget constraints explains that most of the spending on the team is not “new money,” the popularity of the team still generates interest and spending on other local businesses. The spike in employment rates after the Thunders arrival and its subsequent rise in popularity suggest that
the organization could have provided Oklahoma City citizens with more job opportunities. Whether it be directly through working with the franchise, or in other industries that were positively affected by the team’s arrival, it is reasonable to suggest the team’s presence had a positive impact on employment in the Oklahoma City area. However, the trend in employment rates by industry suggest that while the Thunder may have impacted employment, it is likely by a very small margin. Finally, GDP in the Oklahoma City area, both as a whole and by industry, have increased consistently after the organizations arrival. While it is difficult to suggest that the rise in GDP was entirely due to the Thunder, it is equally difficult to ignore the potential impact the organization had. The data collected for this study and the trends presented by it suggest that the Thunder had a positive, albeit slight, impact on the Oklahoma City economy.

5.3: Shortcomings

As with any project, this study certainly contained some weaknesses. Namely, the lack of placing an empirical value on the team’s impact is something that would enhance the paper immensely. However, the tools necessary to perform such a task were not available. The cost of obtaining such programs and receiving the training to understand it was far too great to be utilized in this study. Additionally, it would have been very beneficial to the paper to find a way to examine the intangible impact professional sports have on a city and its citizens. While it is noted that professional sports dominate conversations in the Oklahoma City area, it would have been very interesting and beneficial to attempt to come up with an empirical value on how much it means to the citizens to have a professional team in their city. Along the same lines, the resources necessary to perform this task were far too expensive and time consuming to be utilized for this paper.
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