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The Economics of New Sports Stadiums

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Introduction

It is a common American belief that baseball is our national pastime, but over the years hockey, basketball, and football have joined it, as sports in general have taken over as America's national pastime. Every major city in the country now has a sports franchise, and some larger ones have four or even more. To get these teams to come to certain cities, or stay in others, local governments have waived the benefit of a publicly financed facility in front of the franchises. Public policy and public finance is a complex set of issues, indeed some people spend their entire lives learning about and understanding these issues. When it comes to public finance of a sports facility, there is even more commotion surrounding the issue, and a more complex set of rules and beliefs that affect people's opinions. In this paper I will look at public finance for professional sports facilities, and whether it is a wise investment for local (state/city) governments, using economic theory and case studies to come to a conclusion.

The first thing I will look at is public finance theory and how it correlates with sports facilities. The basic theoretical models that apply are public/private goods, positive and negative externalities, direct/indirect outputs, and public choice. Public good theory is whether or not the free market will produce a good, by determining whether or not it is exclusionary and if it has shared consumption. Using these criteria, goods fall into four categories: public, private, toll, and common pool goods. In most cases the "invisible hand" of the free market will supply private goods and most toll goods, while common pool resources are normally available to everyone at no cost except to the environment. This means the government's role is to regulate common pool resources, provide a few select toll goods (although often at a cost), and provide public goods. Positive and Negative externalities play an important role in the production of goods with public finance, as a positive externality from a good is a benefit for people who do not pay for that good, while a negative externality is an additional cost to people who do not

pay for and consume the good. Because of this, producers will overproduce goods with a negative externality because of costs that they do not have to shoulder, while goods with a positive externality will be underproduced because there are external benefits for those who do not purchase the good. Outputs are also very important in public finance issues, because a wise investment will always at least get a return equal the initial input, but with many publicly financed projects, the output is difficult to measure because of many indirect, secondary effects. Because of this, care must be taken to measure both the direct returns/outputs on the investment, and the indirect, but often just as important, benefits.

The final model that is important to assess when dealing with public finance is public choice theory. This theory dictates that the decision of what the government chooses to finance should be made by the public's choice and not purely economic costs and benefits. This means that even if money is being spent on a wasteful project, if the public wants the money spent, than it should be spent. This school of thought basically says that government spending should be based upon public wants and not economic decisions. These four economic principles are the backbone of public finance, and should theoretically combine to determine whether or not a sports facility should be publicly financed.

I will look at three different cities for my case studies, to see the different approaches that cities haven taken towards public finance of professional sports facilities, and what has resulted from these different decisions. The only caution I have is that even though these cities have taken different roads as far as their decisions, every city and situation is unique, and all of the cities may have made the correct public finance decisions (although it is doubtful). What is good for New Orleans, may not be good for Boston, but may be great for Baltimore: every city must be looked at in its own

framework, so the answer to whether or not stadiums should be publicly financed may have multiple answers.

The first city that I am looking at with my case studies is Baltimore, which is a city that, with the help of the state of Maryland, has publicly funded two new stadiums in recent years, one for baseball, and one for football. The baseball stadium has been a model, both architecturally and how it was financed, for many other cities since it was built in 1992. Its building has coincided with a resurgence in the downtown Baltimore area, and I will examine how related the stadium and resurgence really are. In 1983, the Baltimore football team, the Colts, left under the cover of darkness for a new life in Indianapolis, but two years ago, they gained a team back when the Cleveland Browns moved in and renamed themselves the Ravens. As part of the deal to coax the Browns to Baltimore, the city and state offered to fully finance a new football-only stadium for the team, and I will look at the implications of this decision, along with the implications of an economic conflict with Washington's team.

The second city that I will look at is Cleveland, which much like Baltimore was in a slump in the 80s, and was even known as "The mistake on the lake." In recent years the city has funded a new baseball stadium, much like Baltimore's, and has also funded a new football stadium to attract a team to replace the Browns who left for Baltimore two years ago. With Cleveland, I will look at the economics of their new baseball stadium, including the possibility of using it to jumpstart economic growth in the downtown area. I will also look at the costs of losing a team, and then needing to provide bait to attract another team, because public choice demands it.

I will also do a few mini-case studies of different aspects of a few cities that I believe play an important role in determining whether or not stadiums should be publicly financed. New Orleans is a very unique city because although its team, the Saints, do not have a big effect on the city, New Orleans has the benefit of being a great visitor's

city, so it is the regular recipient of one of the best positive externalities that exists, the Super Bowl. New York is a city where sports teams thrive, but there is a unique situation where the suburbs are competing with the city for the right to house the Yankees. The final city I will discuss is Boston, where public choice, politics, and economics conflict, and as a result no one seems to be able to make a decision either way. I will finish up by analyzing the different decisions and show what I think of public finance for sports facilities using the information from both the theoretical models and the case studies.

Theoretical Models on Public Finance and Professional Sports Facilities

Public finance, or government spending, is a complex issue, because there are different schools of thought on how to determine how much should be spent, and on what. An economist wants government spending to be based on the economy, as a tool for manipulating aggregate demand, with the money being spent on things with a large multiplier--so that a dollar spent will have the largest possible effect on the economy. Someone who subscribes to the public choice school of thought will want spending amounts and uses to be determined by the general public, or elected officials who represent them. But no matter how someone feels government spending and public finance should be determined, most people agree on a few basic theories which determine whether or not the government should be involved in financing something. This is how, in theory, a locale should determine whether or not to publicly finance a professional sports facility.

Whether something is a public good is the first step in determining whether it should be publicly financed, because a public good, like national defense, street lights, and roads, will not be provided by the open market. No one is willing to pay for a good that anyone can use and not be charged for the use, so the government has to provide these goods if they are deemed to be necessary. Although there is often debate as to

what public goods are necessary, like 100 million dollar stealth bombers, there is not debate as to who should be providing the good. This however, is the question that professional sports facilities face in public good theory. Professional sports facilities are exclusionary, in some cases very exclusionary, as there are great costs involved in attending a professional sporting event. Although exclusionary, sports do have shared consumption, because 50,000 people can enjoy a sporting event in a stadium as much as 10,000 people, and often times the additional spectators can make the event even more exciting. The only time pro sports do not have shared consumption is when an event is sold out, and it is not possible for the general public to buy tickets (except through scalpers on the black market), but it rarely occurs, and often only for football games in a few cities, like Washington and Green Bay. As it is usually the case, I will assume that sports do qualify as having shared consumption.

Because professional sports do have shared consumption, but are exclusionary, it puts them into the general category of toll goods, like theaters, cable TV, state parks, and toll roads. Public finance of toll goods is a more complex issue than that of public goods, because in many cases the open market will provide toll goods, it results in oligopolies with lots of power that need to be regulated. Certain toll goods are publicly financed and controlled, like toll roads and state parks, to keep prices in check and facilitate regulation, but also to prevent abuses. When these toll goods are publicly financed, they are also run by the government, and the revenues go to the government. Even though a professional sports facility falls into the general category of toll goods, it is not like a toll road or state park, because if a stadium is publicly financed, the revenues from ticket sales will not go to the government. If a stadium is publicly financed, and then handed over to the owner of the team that will be playing in the stadium, it would be like the government building a toll road, and then giving a private company the right to

charge tolls on that road--an absurd notion. Therefore, if a decision is based solely on public good theory, a stadium should not be publicly financed.

One thing that public good theory does not take into account is externalities, and sports facilities have an enormous amount of externalities, most positive, but a few negative. The primary negative externalities of a sports facility are increased traffic around the facility, a need for more police in the area, and noise pollution. However, even the negative externalities are partially offset: the increased traffic benefits local stores and restaurants, and the extra police are a deterrent to crime. There are many other positive externalities too: more hotel rooms in a city are filled, there are more visitors to a city, a city's image can be improved, a sports facility is a good way to introduce businesses to a city, and then attract them, and of course there is the emotional impact that sports can have on the people of a city.

The problem with looking at the externalities above is that there is no way to approximate the monetary impact of some of the benefits (and costs), and in some cases there is no monetary impact. The impact of sports on people's emotions has virtually no economic impact, but it is a factor that still must be included. A great example is a state park with an admissions fee--even if the admission fees don't cover the entire cost of operating the park, it will still be supported because it provides benefits to the environment, to schools that use it, and to future generations by keeping open spaces. Because the externalities do not have a determinable monetary value (I will consider hotels and new businesses as outputs), their consideration in the determination of whether public finance is a viable and wise investment is only as something that can tip an undecided mind either way, not as a primary reason for finance.

The most important determinant for whether someone will ultimately make an investment is whether or not they can get a sufficient return on the investment. Since this is the most important element in a decision on investment, which public finance is,

outputs should be the primary determinant in whether something should be publicly funded, but it must be remembered that outputs not only include direct monetary returns, but also indirect monetary benefits that are similar to externalities. Different people on different sides of the fence have killed many trees and consumed much oxygen in the argument over how great the quantity of returns from a public investment in a professional sports facility really are. In general, however, there are certain outputs that are commonly accepted as resulting from the creation of a stadium or arena.

The direct outputs that a locale, whether it be a state, county, or city, receives is the money received directly from the stadium or the team(s) using the facility through a long-term lease. This usually includes all or most of the following: a fixed amount of rent, revenue secondary events like concerts, and portions of revenues from tickets, concessions, and parking, and even occasionally a portion of luxury suite and souvenir revenue. The total of these direct revenue sources vary greatly between different situations, so it is an important consideration for a locale to know, before any finance is approved, what type of lease will be signed, and what yearly revenues can be expected as a result of the lease. There are also some less direct revenue sources for a city or state. A team's total salary (salaries of all of the players combined), is often quite significant (as much as 50 million or more), so income taxes can provide significant revenue for the state, but if it is a city or county that is financing the facility, this provides little income, because local income taxes are usually extremely small or there are none.

The just as important, but often overlooked, outputs from a sports facility are the impacts that it has on a city's economy. The area immediately surrounding a stadium undergoes a huge economic boom, because there are enormous amounts of people traveling through the area. Restaurants and shops alike will all benefit if their are 40,000 people visiting the local neighborhood more than 80 times a year for a baseball game. There are also many jobs created as a direct result of the stadium, from concessionaires

to executives to security guards. Hotels in a city receive a definite increase in rooms filled, both due to visiting teams, but also people visiting the city for a sporting event. There are even businesses that relocate to a new city as a partial result of there being a stadium with a team in the area. These indirect outputs, although difficult to quantify, can be measured using pre and post stadium statistics from other cities, although other variables must be taken into account when doing so.

The final piece to the public finance puzzle is public choice, and most often times this is the factor that wins out. In a theoretical model, public choice would have a limited role, although in a theoretical model, the public would also be educated about the options, which everyone knows is not true (it is one of the few things that everyone does know). The only problem is that in the real world, nothing will be publicly financed if the majority of the electorate is against it, because the elected officials that approve public financing will almost always be up for election within a few years, and very few politicians will risk their hides for a sports facility. Even if there is an official who is willing to back a publicly financed sports facility, most local areas have laws that require major expenditures to be passed by a vote of the general populous. Because of this, in the real world (which we do live in whether we like it or not), a certain level of public approval must be the first hurdle cleared, no matter how wise an economic investment public finance might be. A combination of all of the other factors is what should determine whether a stadium is publicly financed.

Case Studies

Baltimore is a city that has recently funded, with the help of the state of Maryland, two new sports facilities: Oriole Park at Camden Yards, a baseball stadium built in 1992, and a football stadium that is currently being built. Both stadiums were paid for with bonds, at a cost of almost 200 million dollars apiece, floated by the state, that are being

paid back with revenues from a lottery put out by the Maryland Stadium Authority (MSA). This is a significant investment, but the stadium that is open has helped to revitalize what used to be a run down downtown and waterfront area. There is, however, a great conflict over exactly how much of an impact the stadium has. Using data from the baseball stadium, and stadiums in other cities across the country, the Maryland Department of Business and Economic Development (MDBED) predicted that the new football stadium would create 1,394 new jobs and add 110.6 million dollars per year to the Maryland economy. This is an impressive economic impact for the state, but it conflicts with the 534 jobs and 33 million additional dollars per year that the Maryland Department of Fiscal Services (MDFS) predicted, and that the Congressional Research service agreed with during a Congressional probe into public finance of sports facilities.

There must be some explanation for these enormously conflicting numbers that come from two different departments of the same state government. The MDBED responded to the more recent MDFS findings, stating those numbers did not take into account income growth and increased spending per capita, a difference that does obviously not account for over 70 million dollars and 800 new jobs. The MDFS fired back by saying that the money spent on a football game calculated in the MDBED study did not take into account the portion of the spending that would be subtracted from other entertainment industries, which is only a transfer of revenues between industries, and not additional dollars spent.

When the CRS analyzed the effectiveness of the state's investment in the new stadium, its primary indicator of effectiveness was dollars spent per job created, which ranged from 127,000 to 331,000 for the two job creation estimates. The CRS then compared this to a Maryland program designed to create jobs which spent 6,250 dollars per job created. According to this comparison, the stadium was an enormously wasteful investment, but it is an absurd comparison, because the primary function of the new

stadium is not to create jobs, and it also fails to take into account the direct annual revenues that the state receives as a part of the lease signed with the football team. What this goes to show is that a statistic, in this case the number of jobs created, can be construed as a positive externality, or a wasteful investment considering the amount of money used to create those jobs.

Baltimore's two publicly funded stadiums were an enormous investment by the state, and they have a positive economic and morale benefit for the city, but in the end the success of an investment is generally dependent upon the direct monetary returns from it. Because the lease agreed to between the city and the team, which calls for an annual revenue payment to the State of as little as 540,000 dollars, generates so little direct returns, the economic wisdom of Baltimore's enormous investment should certainly be questioned.

Cleveland spent 462 million dollars on the Gund Arena, an indoor basketball arena, Jacobs Field, an outdoor baseball stadium, and a parking garage between the two facilities. This money, much like the money spent in the city of Baltimore, was to help rejuvenate the downtown area, but in this case to also help raise up a city that suffered through two difficult decades in the '70s and '80s. In the early nineties, despite poor preparations, a general vote in Cuyahoga County on the public finance of the two facilities passed with 51.7% of the vote, with an even lower percentage within the city of Cleveland. But by the time the two facilities were built, the initially expected public investment of 170 million dollars had increased substantially. This was primarily due to gross miscalculations by public officials on the costs of the facilities, and public officials that backed themselves into a corner by assuming an unrealistic private portion of funding--1/2 of the total cost of the facilities.

The Cleveland "Gateway Plan," which was the project initially approved in the general vote, was a good economic plan for the county, because it provided for a

public/private partnership in funding, a significant yearly rent payment by the teams. The only problem was that the plans had not even been drawn up for the baseball stadium, while the basketball team had not even committed itself to moving to a new arena, even if it was publicly funded! The planning failure came at a large financial cost to the taxpayers, because the county had to substantially sweeten the deal for the two teams to guarantee commitments from them and avoid looking like they had gotten caught with their pants down, which they had. The generous public finance of 170 million dollars from a sin tax on beer and cigarettes, a great way to generate revenue because the demand for them is substantially inelastic, and they are socially "bad" goods, was poorly spent, and as a result the taxpayers of Cleveland had to spend even more money to make sure they did not lose all of their initial investment.

New Orleans represents a unique situation that some cities may find themselves in, where there is an irregular, but substantial boom to the city as a direct result of having a stadium, which is the Super Bowl. The SuperDome, a domed stadium in New Orleans, was publicly financed by the city in the 70s, and has proved to be an economic and financial windfall for the city. The Super Bowl is estimated as pumping over 300 million dollars into a city's economy, as every restaurant, store, bar, and hotel in and around the city is filled for two weeks. Because it is such an enormous economic benefit to a city, the possibility of a Super Bowl must be considered as an indirect output, although only cities in warm climates or that are building domes, as these are the only places where Super Bowls are held.

New York is another city that finds itself in an interesting position, that of competing with its own suburbs for a team. New York's football teams have long made their home in New Jersey, but the owner of the Yankees baseball team, baseball's most famous team in the country's largest city, has been talking with county officials in New Jersey about moving across the river. This puts the city of New York in an awkward

position, because the Yankees are probably the most wealthy team in sports, with 40 million dollars per year in local media revenue alone, and could easily afford to build their own stadium and still be profitable. Because the owner of the Yankees, George Steinbrenner, is a shrewd businessman, he will move into a new publicly financed stadium if it is offered to him, so this puts the city of New York in the position of spending money on the Yankees when they should not have to, or losing face as the largest city in the US loses a team to a New Jersey suburb.

Boston is the final city that I will look at, because while Cleveland and Baltimore may have made financial decisions based on emotions and not economic wisdom, Boston has trouble making any decisions at all. Two years ago the much touted FleetCenter was completed in Boston, a fully privately financed facility, with the city of Boston covering nothing more than minimal infrastructure costs. What people forget is that it took almost ten years for approval of the facility, when the plan was for full private financing from the first day. That the city of Boston could not get it together to simply approve a virtually free (for the city) facility that would have a significant impact on the city, while other cities have been willing to pay upwards of 400 million dollars. Many cities have cheated the taxpayer by approving to many funds for what basically amounts to a private facility, while Boston is at the other end of the spectrum, cheating itself because it can not get together along political lines.

Analysis and Conclusion

Many locales have publicly financed stadiums, while others have allowed teams to leave instead of commit to that type of investment, while still other cities have had owners of teams that were willing to pay for their own stadiums (what a novel concept). When looked at from a global, or even national perspective, most economists would probably either be rolling on the floor, laughing at the stupidity of the cities, or crying

because they know their tax dollars are being wasted. From a national or international leader's point of view, public finance of these facilities is an economic travesty because the cities are simply holding each other hostage. They are competing each other and driving prices up, which in this case is the amount of public finance that sports teams receive for stadiums. From a global governmental perspective, the cities should let the private market dictate where teams and stadiums go, and let the owners pay for a stadium. Just like a movie theater in a small town, owners will build stadiums and put teams where there is sufficient demand for it.

The only problem with this is that cities do not think on a global level, and they can not, because people in a city do not think global, they think locally, and because of this, a city needs to plan ahead, and determine whether it is beneficial for the local area to publicly finance a stadium. It should take into account the direct and indirect economic benefits, the externalities of a stadium, and how much of a partnership the city will have with a team. Cleveland did this, except it did not involve the teams in the process, so what started out as a fair partnership between city and team turned into an unfair agreement that allowed the two teams that benefited to virtually steal a stadium. This includes what kind of lease the team is willing to sign, and how much annual revenue the city will be paid for rent and portions of stadium revenue they will receive. If a team is willing to sign a fair lease with the city that involves a substantial yearly payment for use of the facility, it is determined that the team will have a substantial economic impact on the city, and the people of a city approve of the public finance of a facility, then there is only one more thing that a city should consider prior to approving funding for a stadium: the opportunity cost.

In the past month I have read an enormous amount of literature about public finance of sports facility, but during the entire time, I do not believe the words opportunity cost crossed my path a single time. Many writers have implied it, but I believe it is just as

important as any other factors in the financing of a stadium. Even if a stadium does provide an economic benefit to a city, if 20 schools can be built in the city for the same cost, that is a pretty serious alternative to consider. Although the general public would probably never support an alternate use for stadium finance funds, they could do a downtown area a lot of good in a city that is struggling. In Cleveland and Baltimore, the 200 million dollar stadiums did a lot to help the downtown area, but there is no denying that with the money being directly spent to help the downtown area, even more could have been done. Despite this, I realize we live in our world, and not a global environment where everyone is full of knowledge, and emotions and economics are completely separate issues, and we have to base all of our decisions, economics or not, on the world we live in.

To conclude, I would concede that public finance of a professional sports facility can be a wise investment for a city, but only in the rare cases where there is a combination of public support, economic benefit, and financial return. Otherwise, when decisions is made with emotions and not intelligence as they often are, public finance of professional sports facilities is wasteful governmental economics.

Web Site References:

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