The Analysis of North American "Big Four" Sports Leagues Basing on Geographical Division

Peter Titlebaum, University of Dayton, Todd C. Koesters, J.D. University of South Carolina in Columbia, and Diane Branca, University of Dayton

Abstract

The purpose of this exploratory study is to better understand the impact of the financial value, size of market, and population distribution on the survivalof individual sports teams basing on existing data. How the dynamics within a geographic area might allow one market to charge a premium for ticket sales when others command only a fraction of the price? How significant a component are luxury suites in the valuation of teams? The analysis of data focused on the traditional big-four top leagues in North America—National Basketball Association (NBA), National Football League (NFL), National Hockey League (NHL), and Major League Baseball (MLB) (n=122). Teams' geographical marketplaces were also studied. The data and information were obtained from the U.S. Census Bureau, *Forbes*, *Fortune*, Arbitron, and the Association of Luxury Suite Directors to understand potential viable markets and teams' impact on success.

Introduction

Forbes lists the changes in major league team value each year. A star athlete may choose to play in a different market, as LeBron James did when he left the Cleveland Cavaliers for the Miami Heat in 2011. The *Forbes* value of the Cavaliers dropped by $121 million with his departure. Likewise, a team's value may increase when it secures a new venue. When the Dallas Cowboys moved into the new Cowboys Stadium in 2010, the team's value increased by $105 million compared to the previous year. A team's stadium contract has more to do with the team's profitability than the gate and TV revenue sharing (Quirk & Fort, 1992). The luxury suite is an important determinant in value because it provides a significant revenue stream.

Luxury suites in professional sports are an important part of the lifeblood of the industry. Teams realize that luxury seating is a highly profitable revenue generator, with an estimated $5 billion coming from suites and premium seating. The *Wall Street Journal* reports that 50% of a team's profit can be drawn from luxury suite revenue (Miller & Washington, 2011). Sport franchises keep most of the revenue from their stadiums and arenas. Luxury box revenue need not be shared with other teams, the league, or other owners (Greenberg & Ward, 2010; Quirk & Fort, 1992). Corporations are the largest purchaser of luxury suites, comprising two-thirds of such revenue.

Corporations purchase luxury suites for many reasons, including building relationships with business clients, gaining an audience with people of political influence, or integrating with a sponsorship agreement (Slack & Amis, 2001, as cited in Titlebaum & Lawrence, 2010; Spotlight TMS, n.d.). The research team investigated existing data regarding the 122 teams in the four professional sports leagues in the United States (Association of Luxury Suite Directors, 2010).

These teams sold a total of 12,559 luxury suites in the 2009-2010 seasons. The numbers of luxury suites are subject to change for many reasons, including relocation to a new facility with a different design, repurposing of space that was nonproductive inventory, or renovation that may reduce the overall number of suites.

Since a team's stadium lease typically ranges from 20 to 30 years, it is understandable that its owners desire favorable terms for their luxury boxes. The Washington Redskins' former stadium, Robert F. Kennedy Memorial Stadium, had no luxury boxes. In contrast, FedEx Field, the Redskins' new home since 1997, holds 280 luxury suites (Association of Luxury Suite Directors, 2010).

A boom in stadium construction occurred between 2000 and 2009. A total of $13.34 billion was spent on major stadiums and another $3.99 billion on major arenas (Miller & Washington, 2011). Thirty-seven new stadiums and arenas were built during this time: 5 in the NHL, 7 in the NBA, 12 in the NFL, and 13 in MLB (Miller & Washington, 2011).

Dallas Cowboys' owner Jerry Jones must have understood the value suites represent. Jones added 100 luxury suites in 2009 during the construction of the new stadium, increasing the number from 200 to 300 (Casselman, 2009). The teams benefit because their clients pay for suites up front, without regard to the team's success on the field (Casselman, 2009). Therefore, their revenue flow is guaranteed. The financial gains can be tremendous because luxury suites represent a primary source of revenue for the teams (Lawrence, Kahler, & Contorno, 2009).

Apparently, the issues of relocation, contraction, and expansion, affect the survival and prosperity of the professional teams. Relocation occurs when a franchise moves from one city to another. Expansion refers to a league's development and growth. Contraction is defined as folding, eliminating, or disbanding a team or league.

In this study, the researcher attempted to gain a better understanding on few key issues: (1) what are the geographical reasons that best explain the rational practices of expansion, relocation and contraction? (2) what there is the impact of luxury suite industry on teams' economy?

Relocation

Relocating to a new city to be housed in a better stadium is not a new phenomenon. Economics is a key driver. The New York Giants (MLB) moved to San Francisco in 1958 for a stadium with 40,000 seats (Chapin, 2000). The economics of remaining in New York were difficult because the marketplace was saturated and the fan base split among three major teams: the Yankees, the Dodgers, and the Giants. Due to baseball's unique antitrust exemption, moving a franchise is more likely to occur today in hockey, basketball, or football than in baseball. Baseball's relocation exemption was addressed when Congress specified that the Curt Flood Act of 1998 did not change how antitrust laws applied to the business of baseball "relating to or affecting franchise expansion, location or relocation, (and) franchise ownership issues" (*Piazza v. Major League Baseball*, 1993, as cited in Day, 2002, p. 544). In essence, the antitrust exemption gives MLB the ability to prevent teams from moving from one city to another without a majority owners' vote, whereas stringent regulations do not precluded NFL, NHL, and NBA teams from moving.

Bud Selig, longtime commissioner of Major League Baseball, recognizes the impact the antitrust exemption has over relocation plans. Selig commented, "If you take the antitrust exemption away, people can move wherever they want to move" (Gravely, 2001, as cited in Day, 2002, p.546). This was not the case in baseball's early history. Walter O'Malley, owner of the

Brooklyn Dodgers, moved his team to Los Angeles in 1958 and obtained title to land on which he built a new stadium (Quirk & Fort 1992). In recent times, offering a stadium became the acceptable way to attract a team.

The courts decided the NFL did not have an antitrust exemption when the Raiders succeeded in 1982 in their suit against the league, moving from Oakland to Los Angeles into the Coliseum vacated by the Rams (Wunderli, 1994). In 1985, the St. Louis Cardinals (NFL) were looking for a better place to play than Busch Stadium. Owner Bill Bidwell wanted a larger stadium that was not shared with a baseball team. Both the football team and the baseball team provided the city net operating income exceeding $5.6 million (Quirk & Fort, 1992). St. Louis' mayor favored a plan to refurbish Busch Stadium with luxury boxes and extra seating instead of building a new stadium (Quirk & Fort, 1992). When Bidwell made a 1988 request to the NFL to relocate his team from St. Louis to Arizona, he did not receive much opposition from the NFL owners in light of the court decision in the Oakland Raiders case. St. Louis became another city to lose an NFL franchise.

Relocation was not new to the Rams. Originally housed in Cleveland from 1936 to 1945, the team moved to Los Angeles and remained there for 33 years, until Anaheim tempted them to move in 1980. The team left California in 1995 after St. Louis put together a sweetheart deal for a new stadium. St. Louis provided the Rams a guaranteed three-year sellout of premium seating, paid $29 million in relocation fees to the NFL, and guaranteed ticket sales of 47,800 annual patrons or 85% of the Edward Jones Dome capacity for the next 15 years (Greenberg, 2004). Many teams have received such incentives to relocate to a new city in the modern sports era, including a guarantee of sold-out luxury suites over a number of years. Los Angeles is currently without an NFL team, but, according to the *Los Angeles Times*, the possibility of developing and building a stadium for a prospective team was discussed with two companies. One caveat: the team would have to commit for 20 to 30 years to remain in that proposed $1 billion stadium (Connell, 2011). In all likelihood, LA is trying to protect itself after losing teams to Oakland and St. Louis.

Contraction

Contraction has occurred in all four leagues. Rosner (2003a; 2003b) defines contraction as eliminating a team from a league because it failed to generate enough local revenue, thus increasing revenue for the league's remaining teams. In reality, the leagues employ the threat of contraction as a tactic to force communities to support new stadiums or face losing their teams entirely.

Fourteen franchises in MLB contracted between 1876 and 1899. Ten teams folded in the NBA after it was formed in 1949. In the NFL, 38 franchises ceased to exist between 1920 and 1952. Five teams in the NHL folded between 1918 and 1942.

When the American Basketball Association (ABA) merged with the NBA in 1976, the ABA's four teams—New York Nets, the Denver Nuggets, the Indiana Pacers, and the San Antonio Spurs—paid the Kentucky Colonels and the St. Louis Spirit $3.3 million each to fold their respective teams (Day, 2002; Quirk & Fort 1992). The ABA owners needed unanimous approval for the merger to take place; however, St. Louis owner Ozzie Silna held out for more money. The ABA owners would later agree to $3 million and a share of TV revenue from the four ABA teams entering the NBA (Abrams, 2006).

The key line of interest to NBA executives in the Silna-worked TV contract reads, "The right to receive such revenues shall continue for as long as the NBA or its successors continues in its existence." Silna and his heirs will receive compensation every time a new NBA television contract is negotiated, even though they do not have a team in the league. This deal, which started at about $300,000 per year in 1976, grew to payments of $24 million annually for the NBA's 6-year contract that ran from 2002 to 2008 (Abrams, 2006). This number is likely to grow, proving that for some, contraction can be extremely valuable.

Baseball has approached the issue of contraction somewhat differently. Commissioner Selig formed a Blue-Ribbon Panel on Baseball Economics ("Panel") to research and make recommendations regarding "revenue disparity and structural reform" (Levin, Mitchell, Volker, & Will, 2000). The Panel suggested that if MLB followed its recommendations, there would be no reason to contract teams in the league (Levin et al., 2000). The Panel proposed relocation as a better alternative to contraction, as it presented an opportunity for teams to compete in areas better financially suited for them. A more competitive team for the league would improve MLB and help generate more revenue league-wide (Levin et al., 2000). In essence, the Panel gave the commissioner authority to use the threat of contraction as a means to encourage new stadium development and the exploration of franchise relocation.

The Major League Players Association challenged the league's ability to contract teams in 2001. The collective bargaining agreement (CBA) reached in August 2002 between players and the league provided that no team could fold until 2006. In addition, the agreement stated that the owners could contract two teams in 2007 as long as the players were notified by July 1, 2006 (Rosner, 2003a).

Early in 2001, Florida Marlins ownership decided it did not want to fund a new stadium on its own. Selig wrote a letter on April 25, 2001, to Florida Senator J. Alex Villalobos that stated, "Unless [public stadium] funding was secured, the Marlins would be a prime candidate for contraction or relocation. Bluntly, the Marlins cannot and will not survive in south Florida without a new stadium" (as quoted in Zimbalist, 2005). In this case, the threat of contraction produced a desired result. The Florida Marlins moved into a new stadium in the spring of 2012. In November 2001, the threat of contraction was used again. MLB owners voted 28-2 to contract the Minnesota Twins and the Montreal Expos. Selig indicated the underlying reason for contraction was each team's failure to generate sufficient revenue: "It makes no sense for Major League Baseball to be in markets that generate insufficient local revenues to justify the investment in the franchise" (as quoted in Saporito, B. 2001). The result of the owners' vote was that the Twins stayed in Minnesota but moved into a new stadium in 2010. Before the 2002 season, the league purchased the Expos for $120 million and assumed ownership. The team moved to Washington in 2005, changed its name to the Nationals, was sold in 2006, and moved into a new stadium in 2008 (Miller and Washington, 2011; Schoenfield, 2002.

On Opening Day 2011, Tampa Bay Rays' owner Stuart Sternberg asserted that Commissioner Selig was growing impatient with the city's indecisiveness regarding a new stadium (deMause, 2011). However, the Rays may have difficulty leaving the city since their current lease at the Tropicana Dome runs through 2027, and obtaining a sweetheart deal from another location seems unlikely (deMause, 2010).

Expansion

One threat to all professional sport leagues is entry by a new, competitive rival. In baseball, when the American Association (1882–1891) disbanded at the end of the 1891 season, 8 of its 12 teams joined the National League. Conversely, all 9 teams from early basketball leagues—the National Basketball League (1937–1949), and the American Basketball Association (1967–

1976)—survived and are now in the NBA (Quirk & Fort, 2002). This merger of ABA expanded the NBA by four teams.

The NFL, MLB, NHL, and NBA have typically held monopolies in their respective professional leagues. One way to prevent a rival from entering an area is through expansion in previously unoccupied markets. Expansion could be a tactic used to fend off rival leagues, further cementing their current footholds. Selig's Blue-Ribbon Panel asserted the baseball structure under which clubs in smaller markets could have recurring consistent opportunities to contend for championships (Levin et al., 2000).

In 1993, the NFL expanded the league with two teams, the Carolina Panthers in Charlotte, North Carolina, and the Jacksonville Jaguars in Jacksonville, Florida. Fourteen MLB teams were added through expansion between 1961 and 1998 (Greenberg & Ward, 2010; Rosner, 2003a), resulting in an 87.5% increase of teams in the league. The last four MLB teams added were the Colorado Rockies and Florida Marlins in 1993, and the Arizona Diamondbacks and the then-Tampa Bay Devil Rays in 1998. The Colorado Rockies played in Mile High Stadium on a temporary basis while Coors Field was being completed (Clem, 2010).

Existing NFL teams are generally granted exclusive territorial rights. An NFL team is given a 75-mile radius from its home field, except for Green Bay, where half of its games were played in Milwaukee (Knauf, 2010; Quirk & Fort, 1992). The Packers changed this policy in 1995 and now play all home games at Lambeau Field.

In 1925, the Pottsville Maroons were denied the right to compete for the NFL championship title (win/loss percentage) because they had played a game without permission. This violated Philadelphia's territory, which would cost them their Pottsville franchise (Horrigan, Braunwart, & Carroll, 1981; Quirk & Fort, 1992). MLB enforces the same radius, making teams less concerned about relocation because they know they will be compensated if another team violates their boundaries. Such a case occurred with the Baltimore Orioles, when the Montreal Expos moved to Washington, D.C., and became the Washington Nationals in 2005 (Day, 2002).

Teams can move into another team's territory upon approval of a three-fourths majority vote of league owners, if the antitrust exemption also does not prevent a team from relocating to another city (Quirk & Fort, 1992). In modern playing days, entry into another team's territory has required a fee, such as when the American Basketball Association (1967/1968 season to 1975/1976 season) reached a merger agreement with the National Basketball Association. The ABA's New York Nets, Denver Nuggets, Indiana Pacers, and San Antonio Spurs were brought into the NBA for an expansion fee of $3.2 million. The New York Nets were required to pay $4 million to the New York Knicks for encroaching on their territory (Quirk & Fort, 1992).

The NHL originated in 1917 with four teams but was quickly reduced to three teams in 1918 when one team's rink burned down. The Boston Bruins were the first expansion team in the NHL and the first United States team to gain entry in 1924 with five other Canadian expansion teams (Quirk & Fort, 1992). The NHL would not see growth again until 1967 with the addition of six teams: one Canadian team in Montreal and five U.S. teams in Los Angeles, St. Louis, Minnesota, Pittsburgh, and Oakland. Other U.S. teams were added in 1970 and 1972.

In 1979, the NHL accepted four teams from its rival hockey league, the World Hockey Association (WHA). The surviving WHA teams were the Edmonton Oilers, Hartford Whalers, Quebec Nordiques, and the Winnipeg Jets. They each paid $7.5 million to enter the NHL.

Rival leagues depend on unexploited markets. A league in today's market must be able to support such growth. The World Football League, the NFL's rival, was not successful on its own. When the WFL's Memphis Grizzlies were denied entry into the NFL in 1975, the team sought U.S. court intervention. The Grizzlies lost because "not allowing the Grizzlies into the NFL would not hurt competition" (Wunderli, 1994, p.108). The difference between the Grizzlies' failed entry into the NFL and the ABA's successful entry into the NBA was that the ABA had the power of numbers behind it, and the Grizzlies were on their own.

Analyses of Team Values and Economy Basing on Geographical Divisions

The researcher(s) assumed the size of markets, population distribution, and concentration of corporate businesses would dictate the activities of relocation, contraction, and expansion. Those factors also impact the growth and survival of all professional teams. In addition, values and economic status of teams are heavily influenced by the growth of luxury suite business. In order to text assumptions, data was collected on the four professional sports teams using *Forbes'* most recent values available: 2011 for MLB and the NBA, and 2010 for the NHL and NFL. *Forbes'* values are based on the team's current stadium/arena deal (unless a new arena deal was pending) "without deduction for debt" (MLB Team Values, 2011; "The Most Valuable NFL Teams," 2010; NBA Team Values, 2011; NFL Team Valuations, 2010; NHL Team Values, 2010). The study ranked the values for all 32 NFL teams, 30 NHL teams, 30 NBA teams, and 30 MLB teams. The researchers obtained information about Fortune 1000 companies in U.S. cities where each sports franchise was located. *Fortune* reported company revenues and profits in millions from information issued on May 3, 2010, and April 8, 2010, (Fortune 500, 2010). Population data from the 2010 U.S. Census Bureau and Arbitron ratings from 2010 were obtained. Arbitron is a population measure of a metropolitan area based on U.S. Census information, which is updated annually (Arbitron, 2011). The regions used were based on U.S. Census Bureau geographic regions—Northeast, Midwest, South, and West—with Canada treated as one large region. All of Canada's provinces were combined into one geographical area containing 8 teams because of the country's smaller team population and limited representation in three of the four sports studied.

All the teams were divided into four geographical regions regardless of sport(i.e., Northeast, South, Midwest, and West) . The methodology allows for a different gauge of what is going on in sport by geographical location and by state, not by league. It also offers a clear view on whether professional teams are distributed evenly according to geographical divisions. While a particular sport may not be of interest to everyone, the results of aggregating based on all sports affects the sports landscape. In Rooney and Pillsbury's (1992), it showed people in certain region or location may prefer to participate in or spectate for a certain sports under the influence of culture, climate, and geographical factors.

While examining the financial and economic data, the top-valued team, according to *Forbes*, was the Dallas Cowboys, at $1.8 billion. The Phoenix Coyotes, in the NHL, had the lowest value at $134 million. The research team also studied the cost and number of suites. The New York Yankees had the highest-priced suite, $850,000, and the Buffalo Bills' $28,400 suite was the least expensive. The Dallas Cowboys' new stadium contains 300 suites, the largest number in the NFL. At 10% of the facility's capacity, this is the highest allocation at any stadium or arena in all four sports. MLB's Kansas City Royals have the fewest with just 19 suites. The largest Arbitron market is the New York/New Jersey area, at 15,669,500, and the smallest market is in Edmonton with 730,372 (Table 1).

Within a geographical division, teams were broken down by region and sport, and then color-coded. The South has the most teams at 36. The next highest region is the Mid-West at 29 teams, followed by the West with 27 teams. The Northeast came in fourth with 22 teams, and Canada is last with eight teams.

While the Northeast was the smallest region in the U.S. by number of teams, it had the highest overall mean value per team at $658 million (Table 2). When the researchers reviewed the data for each league, the Northeast again had the top presence from two of the four leagues (MLB and NBA). In the NFL, the South was the strongest region with 11 teams, followed by the Northeast. In the NHL, Canada was the strongest region, followed by the Northeast. It is interesting to note the top mean values and the difference between each sport, which range from a high in the NFL of $1,107 billion to $293 million in the NHL.

Next, the researchers considered mean value by state to see if there was significant variation. This analysis will assist in recognizing the vibrant markets or geographical areas that can afford to sustain/support professional franchises. The states were grouped into those with four or more teams and those with three or fewer teams. This is akin to big/small conference champions. For the "big conference champions," California has the most teams at 15, providing the highest total value at $7,866 billion. However, when considering the mean value of Massachusetts' four teams, at $758 million, that state ranks first and beats California's mean value of $494 million (Table 3).

Among states with three or fewer teams—the "small conference championship"—Wisconsin had the highest total value at $1.609 billion. However, when considering mean value, Maryland, with just two teams, earned the top position at $742 million (Table 4). Maryland would have come in second place overall even if the researchers had not divided the states into the two categories (small and large conference champions.). This fact is noteworthy for a state that only has five Fortune 1000 companies in its marketplace. Vancouver, Calgary, Ottawa, and Edmonton are included in this group due to their considerable presence in the NHL.

Discussion and Conclusions

Arbitron's assessment of metropolitan population plays a role in pricing. The number of Fortune 1000 companies in the marketplace made a significant difference, with few exceptions. The Northeast region of the U.S. has the highest mean value for three out of four of the professional sports teams, even though it has the second-fewest number of teams (22).

Five of the 10 most densely populated states in the country are in the Northeast. Washington, D.C. ranked first, with 9,856.5 people per square mile. New Jersey ranked a distant second with 1,195.5 people per square mile. It is understandable that these states with high population will gravitate more teams toward their regions. However, the population growth has shifted to west and south as well. Both South and West experienced the largest increases in population (U.S. Census Bureau, 2010). The researcher(s) believe these new growing areas should be the ideal places to host new expansion or relocating franchises.

Older ballparks (Yankee Stadium and Fenway Park) were built on inexpensive and undeveloped land, important issues for the owners who financed the facilities. When the population moved from the city to suburbia, the stadium facilities followed. Among the projects built in the 1960s were Arlington Stadium (Dallas/Fort Worth), Shea Stadium (Queens, New York), Tampa Stadium, and the Houston Astrodome (Chapin, 2000). In the modern era of sports, teams have received incentives to relocate to a new city that include a guarantee of sold-out luxury suites over a number of years. The hosting city of a team must present strong financial power, sufficient population, and prosperous corporations to support the teams.

The findings of this article provide information about what regions draw the most value for luxury suites. From an economic standpoint, leagues may be assisted with recommendations for new team placements, relocation, or contraction by using the figures provided. The researchers have presented figures and statistics for a better understanding of the marketplace and viable markets for teams to relocate or expand. Leagues and teams can look for a competitive balance in their region rather than division or conference. Those who follow the sports industry might be surprised to discover that given these criteria, the highest-valued states are Massachusetts and Maryland. Armed with this information, leagues and teams can see the states and regions in the country where a particular sport might be better supported.

Limitations

The article attempted to provide general trends and ideal recommendations for all major professional leagues dealing with relocations, contractions, and expansions. There are certain limitations that impacted the generalizability of the results toward all professional leagues. Here are the discussions of some of the concerns.The U.S. Census Bureau findings and the Arbitron population ranking of markets is limited to U.S. statistics; however, it is imperative that Canada be included, given its considerable presence in the NHL. Assessment of population was derived from other sources for Canada. There are no *Forbes* valuations for Canada unless they had a company in the World Fortune 500. Major League Soccer was not included in the study due to the fact that so few MLS teams have their own facilities. Still, more soccer-only stadiums are being built, and researchers should consider including professional soccer in future studies. New York and New Jersey are combined in this study because the Arbitron population/market data was combined. The researchers approached the study from a macro level since the New York Giants and Jets play in New Jersey. Finally, the Redskins play in Landover, Maryland, but their corporate offices are in Virginia. This study did not include individual sports or college sports due to a lack of valuations.

References

Abrams, J. (2006, July 31). The TV deal the NBA wishes it had not made. *Los Angeles Times*. Retrieved from http://articles.latimes.com/2006/jul/31/sports/sp-aba31

Arbitron. (2011, April 3). Description of Arbitron's Annual Population Estimate Update Process. Retrieved from http://www.arbitron.com/ad_agencies/census_description.htm

Association of Luxury Suite Directors. (2011). *ALSD 2010-2011 Annual Report*. Cincinnati, OH: ALSD.

Casselman, B. (2009, March 6). Luxury strikes out. *The Wall Street Journal*. Retrieved from http://online.wsj.com/article/SB123630159510147111.html

Chapin, T. (2000). The political economy of sports facility location: An end-of-the-century review and assessment. *Marquette Sports Law Journal*, *10*(2), 361-381.

Clem, M. (2010, November 15). Major League Baseball franchises: Historical overview of cities, stadiums and owners [Web log post]. Retrieved from http://www.andrewclem.com/Baseball/MLB_Franchises.html

Connell, R. (2011, April 18). L.A. wants guarantee NFL team wouldn't leave proposed downtown stadium. *Los Angeles Times*. Retrieved from http://latimesblogs.latimes.com/lanow/2011/04/los-angeles-football-stadium-aeg-anschutz-.html

Day, B. (2002). Labor pains: Why contraction is not the solution to Major League Baseball's competitive balance problems. *Fordham Intellectual Property Media & Entertainment Law Journal*, *12*(2), 521-582.

deMause, N. (2010, March 17). St. Pete threatens suit over any Rays move. Retrieved from http://www.fieldofschemes.com/news/archives/2010/03/4071_st_pete_threate.html deMause, N. (2011, April 3). Sternberg, Foster celebrate opening day with Rays stadium taunts. Retrieved from http://www.fieldofschemes.com/news/archives/2011/04/4499_sternberg_foste.html

Fortune 500. (2010, May). *Fortune*. Retrieved from http://money.cnn.com/magazines/fortune/fortune500/2010/full_list/601_700.html

Gottlieb, J. (2002, May 20). Baseball guards its “home field” edge. *Sports Business Journal*. Retrieved from http://www.sportsbusinessdaily.com/Journal/Issues/2002/05/20020506/Special-Report/Baseball-Guards-Its-Home-Field-Edge.aspx

Greenberg, M. J. (2004). Sports facility financing and development trends in the United States. *Marquette Sports Law Review*, *15*(1), 93-172.

Greenberg, M. J., & Ward, B. M. (2010). Non-relocation agreements in Major League Baseball: Comparison, analysis, and best practices clauses. *Marquette Sports Law Review, 21*(1), 7-137.

Horrigan, J., Braunwart, B., & Carroll, B. (1981). Pottsville Maroons. Retrieved from http://profootballresearchers.org/Articles/Pottsville_Maroons.pdf

Knauf, K. (2010). If you build it, will they stay? An examination of state-of-the-art clauses in NFL stadium leases. *Marquette Sports Law Review*, *20*(2), 479-495.

Lawrence, H. K., Kahler, J., & Contorno, R. (2009). An examination of luxury suite ownership in professional sports. *The Journal of Venue & Event Management*, *1*(1), 1-19.

Levin, R. C., Mitchell, G. J., Volker, P. A., & Will, G. A. (2000, July). *The Report of the Independent Members of the Commissioner's Blue Ribbon Panel on Baseball Economics*. Major League Baseball, 1-93. http://mlb.mlb.com/mlb/downloads/blue_ribbon.pdf

Miller, R. K., & Washington, K. (2011) Premium seating. In R.K. Miller & K. Washington (Eds.), *Sports Marketing 2011* (79-86). Loganville, GA: Richard K. Miller & Associates.

MLB Team Values. (2011, March 23). *Forbes*. Retrieved from http://www.forbes.com/lists/2011/33/baseball-valuations-11_rank.html

"The Most Valuable NFL Teams." (2010) Forbes.com [slide show]. Retrieved from http://www.forbes.com/2010/08/25/most-valuable-nfl-teams-business-sports-football-valuations-10_slide_2.html

NBA Team Values. (2011, January 26). *Forbes*. Retrieved from http://www.forbes.com/lists/2011/32/basketball-valuations-11_rank.html

NFL Team Valuations. (2010, August 25). *Forbes*. Retrieved from http://www.forbes.com/lists/2010/30/football-valuations-10_NFL-Team-Valuations_Revenue.html

NHL Team Values. (2010, December 1). *Forbes*. http://www.forbes.com/lists/2010/31/hockey-valuations-10_rank.html

Quirk, J., & Fort, R. D. (1992). *Pay Dirt: The Business of Professional Team Sports*. Princeton, NJ: Princeton University Press.

Rooney, J., & Pillsbury, R. (1992). *Atlas of American sport.* New York: McMillian

Rosner, S. (2003a). The history and business of contraction in Major League Baseball. *Stanford Journal of Law, Business, & Finance*, *8*, 265-288.

Rosner, S. (2003b). Squeeze play: Analyzing contraction in professional sports. *Villanova Spots & Entertainment Law Journal*, *10*(1), 29-37.

Saporito, B. (2001, November 19).Baseball: Yer out. Retrieved from *Time Magazine* http://www.time.com/time/magazine/article/0,9171,1001231,00.html

Schoenfield, D. (2002, February 5). Still 30 teams: Contraction timeline. Retrieved from http://assets.espn.go.com/mlb/s/2002/0205/1323230.html

Spotlight TMS. (n.d.). Further analysis. Retrieved from http://www.spotlighttms.com/

Titlebaum, P., & Lawrence, H. (2010). Perceived motivations for corporate suite ownership in the "Big Four" leagues. *Sports Marketing Quarterly, 19*(2), 88-96.

U.S. Census Bureau. (2010). [2010 Census data]. Retrieved from http://2010.census.gov/2010census/

Wunderli, J. (1994). Squeeze play: The game of owners, cities, leagues and Congress. *Marquette Sports Law Journal*, *5*(1), 83-121.

Zimbalist, A. (2005, May 5). Baseball's monopoly shows its benevolent side with ballpark subsidies. *Sports Business Journal*. Retrieved from http://www.sportsbusinessdaily.com/Journal/Issues/2005/05/20050530/Opinion/Baseballs-Monopoly-Shows-Its-Benevolent-Side-With-Ballpark-Subsidies.aspx

Table 1

Teams by Arbitron Region and Sport

	Region				
League	West (n=27)	South (n=36)	Mid-West (n=29)	Northeast (n=22)	Canada (n=8)
MLB	Arizona Diamondbacks	Atlanta Braves	Chicago Cubs	Boston Red Sox	Toronto Blue Jays
	Colorado Rockies	Baltimore Orioles	Chicago White Sox	New York Mets	
	Los Angeles Angels	Florida Marlins	Cincinnati Reds	New York Yankees	
	Los Angeles Dodgers	Houston Astros	Cleveland Indians	Philadelphia Phillies	
	Oakland Athletics	Tampa Bay Rays	Detroit Tigers	Pittsburgh Pirates	
	San Diego Padres	Texas Rangers	Kansas City Royals		
	San Francisco Giants	Washington Nationals	Milwaukee Brewers		
	Seattle Mariners		Minnesota Twins		
			St. Louis Cardinals		
NBA	Denver Nuggets	Atlanta Hawks	Chicago Bulls	Boston Celtics	Toronto Raptors
	Golden State Warriors	Charlotte Bobcats	Cleveland Cavaliers	New Jersey Nets	
	Los Angeles Clippers	Dallas Mavericks	Detroit Pistons	New York Knicks	
	Los Angeles Lakers	Houston Rockets	Indiana Pacers	Philadelphia 76ers	
	Phoenix Suns	Memphis Grizzlies	Milwaukee Bucks		
	Portland Trail Blazers	Miami Heat	Minnesota Timberwolves		
	Sacramento Kings	New Orleans Hornets			
	Utah Jazz	Oklahoma City Thunder			
		Orlando			

		Magic		
		San Antonio Spurs		
		Washington Wizards		
NFL	Arizona Cardinals	Atlanta Falcons	Chicago Bears	Buffalo Bills
	Denver Broncos	Baltimore Ravens	Cincinnati Bengals	New England Patriots

Table 1 continued

	Oakland Raiders	Carolina Panthers	Cleveland Browns	New York Giants	
	San Diego Chargers	Dallas Cowboys	Detroit Lions	New York Jets	
	San Francisco 49ers	Houston Texans	Green Bay Packers	Philadelphia Eagles	
	Seattle Seahawks	Jacksonville Jaguars	Indianapolis Colts	Pittsburgh Steelers	
		Miami Dolphins	Kansas City Chiefs		
		New Orleans Saints	Minnesota Vikings		
		Tampa Bay Buccaneers	St. Louis Rams		
		Tennessee Titans			
		Washington Redskins			
NHL	Anaheim Ducks	Atlanta Thrashers	Chicago Blackhawks	Boston Bruins	Calgary Flames
	Colorado Avalanche	Carolina Hurricanes	Columbus Blue Jackets	Buffalo Sabres	Edmonton Oilers
	Los Angeles Kings	Dallas Stars	Detroit Red Wings	New Jersey Devils	Montreal Canadiens
	Phoenix Coyotes	Florida Panthers	Minnesota Wild	New York Islanders	Ottawa Senators
	San Jose Sharks	Nashville Predators	St. Louis Blues	New York Rangers	Toronto Maple Leafs
		Tampa Bay Lightning		Philadelphia Flyers	Vancouver Canucks
		Washington Capitals		Pittsburgh Penguins	
Total Value*	$13,395	$20,270	$15,679	$14,465	$2,496
Mean Value*	$496	$563	$541	$658	$312

Note: Team values are shown in millions (USD).

Table 2

Mean Team Value by Region and Sport (in millions USD)

	Region				
	Northeast	South	West	Mid-West	Canada
All teams	n=22	n=36	n=27	n=29	n=8
Low value	$304	$135	$134	$153	$183
High value	$1,700	$1,805	$1,049	$1,067	$505
Mean value	$658	$563	$496	$541	$312
MLB	n=5	n=7	n=8	n=9	n=1
Low value	$304	$331	$307	$351	$337
High value	$1,700	$561	$800	$773	$337
Mean value	$854	$433	$486	$460	$337
NBA	n=4	n=11	n=8	n=6	n=1
Low value	$312	$266	$293	$258	$399
High value	$655	$443	$643	$511	$399
Mean value	$437	$352	$379	$336	$399
NFL	n=6	n=11	n=6	n=9	n=0
Low value	$799	$725	$758	$774	—
High value	$1,367	$1,805	$1,049	$1,067	—
Mean value	$1,101	$1,107	$925	$931	—
NHL	n=7	n=7	n=5	n=5	n=6
Low value	$151	$135	$134	$153	$183
High value	$461	$227	$215	$315	$505
Mean value	$262	$169	$186	$227	$293

Table 3

Big States (4 or More Teams)

State	Number of teams	Total team valuation (millions USD)	MLB	NBA	NFL	NHL
Massachusetts	4	$758	1	1	1	1
New Jersey	2	$714	0	1	0	1
Texas	8	$690	2	3	2	1
New York	9	$668	2	1	3	3
D.C.	4	$621	1	1	1	1
Illinois	5	$635	2	1	1	1
Missouri	5	$555	2	0	2	1
Pennsylvania	7	$556	2	1	2	2
California	15	$494	5	4	3	3
Ohio	6	$526	2	1	2	1
Florida	9	$509	2	2	3	2
Colorado	4	$494	1	1	1	1
Michigan	4	$469	1	1	1	1
Arizona	4	$465	1	1	1	1
Georgia	4	$435	1	1	1	1
Minnesota	4	$432	1	1	1	1
Canada	8	$312	1	1	0	6

Table 4

Small States (3 or Fewer Teams)

State	Number of teams	Total team valuation (millions USD)	MLB	NBA	NFL	NHL
Maryland	2	$742	1	0	1	0
Washington	2	$719	1	0	1	0
Indiana	2	$654	0	1	1	0
Louisiana	2	$617	0	1	1	0
Wisconsin	3	$550	1	1	1	0
North Carolina	3	$493	0	1	1	1
Tennessee	1	$469	0	0	1	0
Toronto	3	$413	1	1	0	1
Oregon	1	$356	0	1	0	0
Utah	1	$343	0	1	0	0
Oklahoma	1	$329	0	1	0	0
Vancouver	1	$262	0	0	0	1
Calgary	1	$206	0	0	0	1
Ottawa	1	$196	0	0	0	1
Edmonton	1	$183	0	0	0	1