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Recommended Citation

Twomey, John, and James Monks. "Monopsony and Salary Suppression: The Case of Major League Soccer in the United States." *American Economist* 56, no. 1 (Spring 2011): 20-28.

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MONOPSONY AND SALARY SUPPRESSION: THE CASE OF MAJOR LEAGUE SOCCER IN THE UNITED STATES

by John Twomey and James Monks*

Abstract

Top tier professional soccer in the United States is operated by Major League Soccer (MLS). The MLS was established and operates under a single entity structure, such that all players negotiate and sign contracts with the league rather than with individual teams. This monopsonistic structure was designed to eliminate competition for players across teams within the league and thus allow the league to suppress player salaries. This paper investigates how effective the MLS has been in achieving this goal and finds that the MLS devotes only about 25 percent of its revenues to player salaries, compared to 50 to 60 percent in most other U.S. professional sports and professional soccer leagues abroad.

Keywords: Monopsony, Labor Demand, Single-Entity Structures, Sports Economics, Profit maximization

I. Introduction

Professional soccer in the United States has historically found limited success. Prior to the founding of Major League Soccer (MLS), the North American Soccer League (NASL) was the only professional league in the country's history to attain status as a top tier league. While many European countries sustained first division leagues, as well as various subordinate developmental leagues, the United States lacked both the depth of talented players and the financial backing to support such a system. The NASL, established in 1968, found limited success, but eventually folded in 1985 due largely to wide financial disparities between the competing clubs, and a lack of centralized control. In 1988, the Fédération Internationale de Football Association (French for International Federation of Association Football), known as FIFA, granted the United States Soccer Federation (USSF) the right to host the 1994 World Cup. As a provision for being awarded the World Cup, the USSF promised to re-establish a first division professional soccer league in the United States. Adopting a singleentity model, the MLS was founded in 1995 as a limited-liability corporation under Delaware law.¹ The league is managed by a board of directors and investor-operators who head the operations of individual clubs. Ultimately however, the league "own(s) and operate(s) all of the teams in the league, assign(s) players and team personnel, and set(s) local ticket and concession prices."² The League has grown and expanded in its fourteen seasons from seven to fifteen clubs and three more will be added by 2010.³ While the league still posts an overall annual operating loss, some clubs operate in the black and the league appears to be trending toward profitability.⁴

The MLS adopted its single entity structure because of the stability and potential benefits such a system provides for a young, developing league. Under the single-entity structure, the league "can increase the value of its sponsorship agreements by ensuring league-wide sponsors that individual clubs will not enter into sponsorship agreements with competitor firms that dilute the value of the league-wide sponsor's investment."5 This allows MLS to secure long term sponsorships with major corporations. In 1996, the first year of MLS play, sponsorships with Adidas, Budweiser and Pepsi were secured with long-term deals.⁶ The corporate structure of the league also increases purchasing power and leads to economies of scale. Investoroperators make executive decisions to support the league's wellbeing as opposed to the interests of individual teams. Most importantly, and perhaps

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controversially, the single-entity structure gives MLS monopsony power over the U.S. professional soccer labor market while still protecting it against anti-trust laws. This structure reduces competition for players between teams and therefore lowers individual player's bargaining power for contracts with the league and is designed to suppress player salaries.⁷

In 1997, the players sued MLS, claiming various anti-trust violations against the MLS. The players claimed that the single-entity structure was simply a conspiracy among team owners to fix player salaries and therefore in violation of Section 1 of the Sherman Anti-Trust Act which states; "Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal."8 The players also claimed that the MLS monopolized the market for first division professional soccer in the United States and colluded with the USSF to do so, a violation of Section 2 of the Sherman Act; "Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony."⁹ The first claim, regarding collusion between teams and the fixing of salaries, was dismissed. In a previous case, Copperweld Corp. v. Independence Tube Corp., the court ruled that a "wholly owned subsidiary is incapable of conspiring with its parent under section 1."¹⁰ The court decided that MLS's single entity structure fell under the Copperweld ruling, with individual teams acting as subsidiaries to the parent company, Major League Soccer. The second claim was also dismissed. The court ruled that because other top professional leagues exist internationally, the market for top level soccer players is not monopolized. Also, in the United States, MLS was established when no other first tier soccer league existed; therefore, the court concluded that MLS could not have monopolized the domestic market because the market previously did not exist.11

In this study, we investigate the degree to which MLS's single entity structure has been effective in suppressing player salaries. We show that the MLS spends a substantially smaller percentage of its revenue on player salaries than other U.S. professional sports and professional soccer leagues

abroad. The following sections of the paper present a review of the literature on monopsony, data and analysis illustrating the impact of monopsony structure on salaries, and a conclusion.

II. Literature Review

Studies of salary suppression both in professional sports and in other labor markets have shown the effects of monopsony power to substantially lower wages below marginal revenue product, a measure of individual players' value. In a study of employer monopsony in the labor market for undocumented workers, Hotchkiss and Quispe-Agnoli (2009) found that employers hold significant monopsony power over undocumented workers. This monopsony power is due to undocumented workers' lack of employment and grievance opportunities in comparison to documented workers. As a result, firms are able to pay undocumented workers much less than their marginal revenue product. This leads to greater profits for monopsonistic firms.¹² This disparity is not unlike that between American and European soccer players. While Americans only have one major domestic league, citizens under the European Union are free to work in any country of the Union. Many of these countries have top flight professional leagues. There are a number of barriers that inhibit MLS players from freely and easily moving to a team overseas. For example, a player must be released by the MLS, which will often charge the purchasing club a transfer fee for buying out a player's contract. Additionally, he must secure a work permit allowing him to work in that country, and be one of a small number of allocated foreign players allowed on a team's roster. These restrictions act as barriers to the free mobility of players between the MLS and foreign leagues and allow the MLS to exercise its monopsonistic power.

One potential major difference between European and American professional soccer however, is that European clubs do not appear to be profit maximizing agents but rather attempt to maximize team performance. This is an effect of the "winnertake-all" aspect of professional sports discussed by Garcia-del-Barrio and Pujol (2007). They argue that professional teams often appear to maximize on field success, even when such success demands the shrinking or altogether loss of profits. Historically, European soccer teams were run as non-profit clubs owned by their members. Many of the top European soccer teams, such as Barcelona and Real Madrid, are still owned and operated under this arrangement. While the labor of average players is generally exploited through a club's monopsony power, due to the right to charge transfer fees, competition for superstars drives up the salaries of the best players.¹³ Garcia-del Barrio and Pujol argue that there is a dual labor market for professional soccer players in the top European leagues. One market for the average or typical player, who lacks name recognition and thus bargaining power, such that teams can exercise their monopsony power; and a second market for superstar players, who are sought after by many teams and therefore use this bargaining power to retain their value for themselves. This reasoning may help us understand why many of the top revenue grossing clubs in Europe, stocked with high profile players, still amass huge annual debt.¹⁴

This "winner-take-all" approach has also been tagged as the "sportsman effect" by Vrooman (2009) while addressing the shift in American professional sports franchises from profit-maximizers to winmaximizers. Win-maximizers will operate up to zero-profit, offering high salaries to attract the best players. As a result we see players in some leagues paid more than 60 percent of total revenue. Vrooman contends that revenue sharing provides competitive balance in leagues only where teams are win-maximizers; otherwise, revenue sharing leads to player exploitation and has no effect on competitive balance.¹⁵ This is because in a win-maximizing league, teams will likely spend a larger portion of revenue on player salaries. If a win-maximizing league also implements revenue sharing, team revenues will be better balanced, and as a result, team payrolls will also be better balanced. Assuming that players are paid for their on-field performance. balanced league-wide payrolls will lead to competitive balance. Additionally, the existence of winmaximizing owners, willing to forego profits in pursuit of on-field performance, will drive out profit maximizing owners or force them to change their objectives (Vrooman 1997).

Examining player marginal revenue product and salaries in the NBA Scott, Long, and Somppi (1985) estimate the degree of monopsony power among professional basketball teams. They estimate player marginal revenue product separately for non-free agent players and tree agents. As expected, they find that non-free agents were paid a much smaller proportion of their marginal revenue product than were free agents, during the 1980–81 season. They conclude that restrictions on player mobility significantly reduce player salaries, and that the removal of these restrictions, in the form of free agency, results in player salaries comparable to their marginal revenue product.

Similarly, Gerald Scully (1989 and 2004) attributes the movement of major American sports leagues away from monopsony control of salaries to the implementation of veteran free-agency rules. Free-agency allows players to shop for higher salaries. Following the implementation of some form of free-agency rules in American hockey, football, and baseball average player salaries grew as much as 5.8 percent faster than league revenue growth, over an extended period of time.¹⁶ An arbitration ruling alleging collusion among baseball owners in 1987 also appears to have resulted in an escalation of player salaries in subsequent seasons (Scully 1989). This explanation assumes however, that teams are win-maximizers who will compete for proven players and will not engage in collusive behavior. In the case of the MLS, the single entity structure of the league is designed to secure the financial stability and overall league growth, rather than emphasize individual team performance. Furthermore, investor-operators are allowed to engage in collusion under the decision of Copperweld v. Independent Tube Corp. due to their single entity structure under the parent organization of the MLS.¹⁷ Given the history of professional soccer in the United States this focus on growth and financial stability may well be the appropriate path.

This paper examines how effective MLS's single entity structure has been in restricting player salaries. The answer to this question has both legal and economic ramifications. While the courts have already addressed the legality of the MLS business structure during the infancy of the league, new evidence on the effectiveness of the structure in suppressing salaries may prompt a reexamination of the antitrust ruling. Additionally, Tavis and Udayan (2008) suggest that monopsony in the labor market may hinder future revenue growth because the inputs to this market will under-invest in their human capital. If this is the case, MLS may be shooting itself in the long term foot by hindering the development of domestic soccer players.

III. Data Collection and Analysis

The degree of monopsony power in a labor market is often determined by estimating the difference between players' marginal revenue products and salaries. This approach is difficult in professional soccer because marginal revenue product is virtually impossible to accurately calculate for soccer players. Marginal revenue product (MRP) is largely based on player performance. In sports such as baseball, where nearly every event in a game can be statistically measured, MRP can be accurately determined for each player. In soccer however, very few events clearly decide the outcome of a game. Scoring is rare, and only a few players account for the majority of a team's goals; therefore, player value is difficult to quantify.

As a result of these difficulties in estimating player MRP, this analysis utilizes an alternative measure of the degree of monopsony control of salaries in MLS by comparing the percent of revenues devoted to player salaries in MLS. This salaries-to-revenue ratio is then compared to other U.S. professional sports and to professional soccer leagues throughout the world that compete with the MLS for player talent. Leagues that devote a smaller percent of revenues to player salaries, *ceteris paribus*, are able to extract the greatest value from player contribution to revenue.

MLS salary data were obtained from the MLS Players Union 2007 list of player salaries online. This analysis uses "guaranteed" salary, which includes a player's base salary plus all signing and guaranteed bonuses annualized over the term of the player's contract. MLS revenue data for the 2007 season was obtained from *Forbes* magazine. *Forbes*' estimated all revenue streams to the clubs including ticket sales, sponsorships, merchandise, television revenue, naming rights, parking revenue, as well as other minor revenue streams. These estimates, by team, and the resulting salary as a percent of revenues are presented in Table 1.

The average annual payroll per team is approximately \$3.17 million. Excluding the top three payrolls (Los Angeles, Chicago, and New York) the average falls to \$2.27 million, with a range of plus or minus \$400,000. Total team salaries seem to have little or no relation to on field success. Los Angeles, whose team salary is more than twice that of any other MLS team, finished with the third worst record in the league (9-14-7) and New York and Chicago finished with middle of the pack records and finished sixth and seventh in the league, respectively. The New England Revolution, on the other hand, posted the lowest payroll in MLS, yet finished the regular season just 5 points (a team is awarded 3 points for a win, 1 for a draw, and zero for a loss in each league match during the regular season) from the top of the table and played in the MLS Cup final in three consecutive years (2005-2007).¹⁸ These facts support the argument that MLS investor-operators are profit-maximizers rather than win-maximizers. They expect monetary return on their investments in players before they expect on field results. For example, the LA Galaxy pays David Beckham

| Team | Revenue (Forbes) | Salary Guaranteed (MLSPU) | %of Revenue |
|-----------------|------------------|---------------------------|-------------|
| LA Galaxy | \$36M | \$9179949 | 25.50% |
| Toronto FC | \$17M | \$2453208 | 14.43% |
| Chicago Fire | \$16M | \$4464113 | 27.90% |
| FC Dallas | \$15M | \$2285499 | 15.24% |
| DC United | \$10M | \$2163103 | 21.63% |
| NY Red Bull | \$13M | \$4909556 | 37.77% |
| Houston Dynamo | \$10M | \$2439999 | 24.40% |
| Colorado Rapids | \$11 M | \$2374164 | 21.58% |
| Real Salt Lake | \$7M | \$2607531 | 37.25% |
| NE Revolution | \$10M | \$1860488 | 18.60% |
| Chivas USA | \$10M | \$1886076 | 18.86% |
| Columbus Crew | \$6M | \$2021398 | 33.69% |
| KC Wizards | \$5M | \$2626175 | 52.52% |
| League Total | \$166 M | \$41271259 | 24.86% |

TABLE 1. Revenue and Salaries by Team in Major League Soccer

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over two thirds of the team's total salary. This is not primarily because Beckham brings success on the field, but because of the tremendous revenue he generates through ticket and merchandise sales. It is no surprise that the Galaxy's total revenue more than doubles the rest of the league and is one of only four teams to turn a profit, yet they did not make the playoffs in the first two years that David Beckham was on the roster.¹⁹ One could argue that the designated player rule, which allows each team to sign a marquee player whose salary is largely exempt from the team salary cap, is evidence of a profit maximization over win maximization objective. For example, since the implementation of the designated player rule, in 2007, two of the three league champions did not have a designated player. Additionally, the New England revolution made three consecutive MLS Cup championship matches (2005-2007) without a marquee European player, and the Houston Dynamo won in 2006 and 2007 without a superstar name on the roster. If win maximization were the primary objective, then teams should be permitted to spend money on players in any way they thought would enhance on field performance. Because profit maximization appears to be the primary goal, teams are only allowed to sign one marquee player, who presumably will fill seats and sell merchandise at least as much as contribute to on-field performance.

Overall the MLS spends only 24.86 percent of its revenues on player salaries. Across the league, Toronto FC has the lowest salary to revenue percentage at only 14.43 percent, while the Kansas City Wizards have the highest at 52.52 percent. Toronto's salary to revenue ratio is so low because they have one of the best attendance figures in the league (ranked 2^{nd} in average attendance in 2007 at 19,864 per game) and thus the second highest revenue in the league, while limiting player salaries to only \$2.4 million. On the other hand, Kansas City spends \$2.6 million on players' salaries but has only \$5 million in revenue.

In comparison to other major U.S. professional sports leagues the MLS salary to revenue ratio is exceedingly low. Table 2 presents the salary to revenue ratio for Major League Baseball (MLB), the National Hockey League (NHL), the National Basketball Association (NBA), and the National Football League (NFL).

Revenues accounted for in these percentages generally are made up of revenue streams that have

| TABLE 2. | | | | |
|---|--|--|--|--|
| Salary as a Percent of Revenue in Other | | | | |
| U.S. Professional Sports Leagues | | | | |

| League | Salary/Revenue% |
|--------|---------------------|
| MLB: | 52% |
| NHL: | Between 55% and 57% |
| NBA: | 57% |
| NFL: | 59.5% |

a more direct link to the players' performance, including ticket sales, merchandizing and television revenue. Excluded are those revenues which may be categorized as unrelated to the players, such as parking. The salary to revenue percentages for the four major American leagues are quite comparable, all falling between fifty and sixty percent of revenue. This uniformity is partly due to similarities between the leagues' collective bargaining agreements (CBA's).

The NFL's CBA, negotiated in 2005, guarantees players 59.5 percent of all football revenues from 2006–2009.²⁰ These "football revenues" include revenues not shared between teams and account for more than 90 percent of all revenues.²¹ From 1975, five years after the AFL-NFL merger, to 1990, the salary-to-revenue ratio hovered around 40 percent, in the NFL. Rising television revenue and the introduction of unrestricted free agency in 1994 combined to lift the player costs to between 55 and 60 percent of revenues, from 1993 to the present (for most years). Vrooman (2009) labels this "evidence of monopsony power erosion from internal competition among owners."

Similarly, under the NBA's CBA, players receive a guaranteed minimum 57 percent of "basketballrelated revenues."22 This percentage is fixed over a period of time, regardless of changes in total revenue. Like the NFL which faced competition from the USFL, the NBA faced external competition from the ABA, from 1967 to 1976. This competition resulted in an increase in the salaryto-revenue ratio from 46 percent, in 1971, to approximately two-thirds, by 1977. Vrooman (2009) states that the monopsony power of the NBA is the weakest of the four major U.S. leagues, and thus the relationship between the league and the players association is the most cooperative. The 1984-85 negotiated salary cap between the league and the players association directly tied player salaries to revenues. As a result, as television revenues grew in the 1990s player salaries grew, as well.

The NHL, under its 2005 CBA, allocates a minimum guaranteed 54 percent of revenue, but with room for that share of revenue to rise. NHL players receive 55 percent when NHL revenues hit \$2.2 billion, 56 percent at \$2.4 billion, and 57 percent at \$2.7 billion."²³ The NHL is clearly the U.S. league most comparable to the MLS. With modest player salaries (compared to the NBA, NFL, and MLB) and a distant fourth in popularity in terms of attendance and television revenue, the NHL provides the best domestic comparison to the MLS. During the 1989-90 season, player costs represented just under 30 percent of revenue. This percent grew to 66 percent in 2003-04 prior to the player lockout. The subsequent collective bargaining led to a lower payout ratio, but one tied to league performance outlined above.

Major League Baseball players round out the list with only 52 percent of revenue going to salaries. This number may be deceiving, however, due to the added cost of minor-league operations run by each MLB team.²⁴ Major League Baseball was the first major U.S. league to introduce unrestricted free agency, in 1976. In 1977, the salaryto-revenue ratio was only 20.5 percent, lower than today's MLS payout ratio. Just five years later in 1982, the MLB salary-to-revenue ratio was 41.1 percent. By 1985, the players' union alleged that the owners were colluding to restrict free agents' salaries. Under arbitration, owners were forced to pay damages of \$280 million, for a period covering the 1985, 1986, and 1987 seasons. By 1992, the salary-to-revenue ratio for MLB had reached 54.3 percent and rose to as high as 67 percent, in 2002. By 2006, the ratio was down to 51 percent due to the meteoric rise in revenue over that time period (\$3.4B in 2002 to \$5.2B in 2006). From 1992 to 2007, MLB had an average compensationto-revenue ratio of approximately 58 percent.²⁵

In general, the big four U.S. sports leagues have all experienced an increase in the payout of revenues to players. MLB had a salary-to-revenue ratio of only 20.5 in 1977; the NHL had a ratio of 29.9 percent in 1989–90; the NFL player costs were approximately 40 percent in 1975; and, the NBA had a salary-to-revenue ratio of 41 percent, in 1990.²⁶ Today, all of these leagues have a salaryto-revenue ratio of between 50 and 60 percent. Vrooman (2009) concludes that monopsony power

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in these leagues has been all but eliminated by a combination of free agency, external competition from competitive leagues (or their threat), and internal competition between team owners that has eroded cartel solidarity. We would add arbitration and legal actions that have restricted non-competitive actions of owners, such as the arbitration against owners in restricting free agent salaries. These developments are consistent with both profit-maximizing owners and winmaximizing sportsmen. The MLS single-entity structure is designed to prevent the internal competition among teams for players that resulted in upward pressure on player salaries in these other U.S. leagues.

The significant disparity between MLS players' salary as a percent of revenue and those of other professional leagues is even more evident when compared with other professional soccer leagues around the world. Table 3 presents total revenues and the salary to revenue ratio for six professional soccer leagues for which we were able to obtain these figures.

With the exception of Japan's J-League numbers, the percentages in this chart were all taken from the Deloitte Sports Business Group's Annual Review of Football Finance 2009. The revenue calculations for each are broken down into four categories; match-day, broadcast, sponsorship, and other commercial revenues, which account for all revenue streams to clubs.²⁷ Revenue data has been adjusted to US Dollars using the exchange, \$1=0.7178Euro. The J-League data, accessible from the league's website, breaks down revenue streams into advertising, gate, league distribution, and other revenues.²⁸ The J-League revenue in the table was adjusted using the exchange,

TABLE 3. Salary as a Percent of Revenue in Other Professional Soccer Leagues

| League/Year | Revenues | Salary/Revenue% |
|-----------------|----------|-----------------|
| France '07-08 | \$1,378M | 71% |
| Austria '07–08: | \$193.6M | 63% |
| Sweden '07-08: | \$129.6M | 63% |
| England '07–08 | \$3,401M | 62% |
| Belgium '07-08: | \$307.9M | 52% |
| Germany '07-08 | \$2,003M | 50% |
| J-League 2007: | \$618.8M | approx 46.9% |

\$1=96.815Yen. Most of the leagues' salaries fall between fifty and sixty-five percent of total revenue, with the exceptions of France at 71 percent and the J-League at approximately 47 percent. Even the J-League, however, nearly doubles the MLS salary as a percent of revenue. The MLS has revenue of approximately \$166 million and thus is most comparable in revenue to the Austrian and Swedish leagues that have \$193.6 and \$123.6 million in revenues, respectively. Both of these leagues spend 63 percent of league revenues on player salaries. Clearly, foreign soccer leagues of comparable stature and finances to the MLS are devoting a larger share of their revenues to player compensation.

IV. Conclusion

The results of this study are clear. MLS salaries as a percent of revenue are significantly lower in comparison to other professional sports leagues in the United States and to professional soccer leagues abroad. MLS's single entity structure, which allows the league to determine player salaries, has proven quite effective at suppressing player compensation. If the MLS were to spend a percent of its revenue on player salaries equivalent with the J-League, 46.9 percent, the lowest percent of comparison leagues in this study, total player salaries would have to increase by more than \$36 million. If it were to spend on a level comparable to other American professional leagues, 55 percent, total player salaries would have to increase by more than \$50 million. Thus far, the MLS has been successful in controlling costs, including player salaries, but its highly effective single-entity structure may be counterproductive to the long term growth of the league.

Tavis and Udayan (2008) found that monopsony suppression of wages leads to lower market growth. Because a monopsonistic market leads to low wages, investment in human capital in such a market is reduced. This low level of investment in human capital leads to a low growth rate.²⁹ The most talented American soccer players will opt to go straight to Europe and play in other leagues which offer much higher wages, or will only commit to short term contracts with the MLS if they feel they have the slightest chance of moving abroad. This leaves the MLS with a mediocre and aging body of players, clearly hindering the success of the league.

Similarly, the single-entity structure of Major League Soccer prevents the adoption of a free agency model that would create competition among internal teams as a mechanism of promoting player salary increases. Only when teams are permitted to compete with one and other in signing players will there be significant salary increases. Absent this form of cross team competition for players, some form of third-party arbitration in setting disputed salaries for veteran players, similar to that found in Major League Baseball may lead to appreciable increases in player salaries. Alternatively, a collective bargaining agreement between MLS and the MLS players union that directly links player compensation to revenue growth, such as that found in the NHL, may also result in higher player salaries.

The implication of these findings is that in order to continue to grow as a successful professional first-tier soccer league the MLS may have to devote a higher percent of its revenues to player salaries. The current MLS collective bargaining agreement lasts until January 31, 2010, with the option of extension if neither the players nor the league wish to renegotiate.³⁰ The history of other U.S. team sports leagues and the current experience of other international soccer leagues suggest that the MLS will ultimately have to raise the proportion of its revenues devoted to player salaries if it wished to retain its top talent and to remain a viable top-tier league.

Notes

- 1. Fraser v. MLS, No. 01–1296 2002 Available from http://caselaw.lp.findlaw.com/cgi-bin/ getcase.pl?court=1st&navby=docket&no=011296. Internet; accessed 4 July, 2009.
- Mathias, Edward. "Big league perestroika? The implications of Fraser v. Major League Soccer." University of Pennsylvania Law Review, Vol. 148 no. 1, November 1999, p203, 35p
- 3. "General Overview." http://web.mlsnet.com/ about/.
- Badenhausen, Kurt and Schwartz, Peter. "Major League Soccer's Most Valuable Teams." Available from http://www.forbes.com/2008/ 09/09/mls-soccer-beckham-biz-sports-cz_kb_ 0909mlsvalues.html. Internet; Accessed 20 June 2009.

- 5. "Big league perestroika? The implications of Fraser v. Major League Soccer."
- 6. mlsnet.com/about.
- 7. Big league perestroika? The implications of Fraser v. Major League Soccer.
- http://www.usdoj.gov/atr/public/divisionman ual/chapter2.htm Sherman Antitrust Act, 15 U.S.C. §§ 1
- 9. Sherman Antitrust Act, 15 U.S.C. §§ 2
- U.S. Supreme Court: Copperweld v. Independence Tube, 467 U.S. 752 (1984) Copperweld Corp. v. Independence Tube Corp.
- 11. Fraser v. MLS
- Hotchkiss, Julie L and Quispe-Agnoli, Myriam.
 "Employer monopsony power in the labor market for undocumented workers." Federal Reserve Bank of Atlanta, Working Paper: 2009–14, 2009.
- Garcia-del-Barrio, Pedro and Pujol, Francesc. "Hidden Monopsony Rents in Winner-take-all Markets-Sport and Economic Contribution of Spanish Soccer Players." *Managerial and Decision Economics*. Vol. 28: 57–70 (2007).
- 14. Sports Business Group at Deloitte. Safety in Numbers Annual Review of Football Finance. London: Deloitte LLP, 2009.
- 15. Vrooman, John. "Theory of the Perfect Game: Competitive Balance in Monopoly Sports Leagues." *Review of Industrial Organization*, vol. 34, no. 1, February 2009, pp. 5–44.
- 16. Scully, Gerald. "Player Salary Share and the Distribution of Player Earnings."*Managerial and Decision Economics*, vol. 25, Iss. 2, Mar 2004; pg. 77.
- 17. Fraser v. MLS
- 18. MLSnet.com
- 19. Forbes.com article
- Garber, Greg. "CBA extension latest accomplishment for Upshaw." Available from http:// sports.espn.go.com/nfl/news/story?id=2387218. March, 2006.
- 21. Florio, Mike. "NFL owners vs. players: Money grab breakdown." Available from http://www. sportingnews.com/nfl/article/2008-05-23/nflowners-vs-players-money-grab-breakdown. Internet; Accessed 19, July 2009.
- 22. Wulterkens, Jason. "MLB players receive the lowest percentage of league wide revenue." Available from http://www.sportsagentblog. com/2008/03/11/mlb-players-receive-the-lowest-percentage-of-leaguewide-revenue/.

- 23. Fitzpatrick, Jamie. "Key Points in the NHL CollectiveAgreement." Available from http:// proicehockey.about.com/od/thenewnhl/a/salary_ cap_expl.htm.
- 24. "MLB players receive the lowest percentage of league wide revenue." http://www.sportsa gentblog.com/2008/03/11/mlb-players-receivethe-lowest-percentage-of-leaguewide-revenue/
- 25. The revenue and compensation values used in these calculations were provided by Major League Baseball, and are available from the authors upon request.
- 26. See John Vrooman (2009). "Theory of the Perfect Game: Competitive Balance in Monopoly Sports Leagues." Review of Industrial Organization, vol 34: 5–44 for a thorough analysis of the history of player costs relative to revenue in the four major U.S. team sports leagues.
- 27. Sports Business Group at Deloitte. Safety in Numbers Annual Review of Football Finance. London: Deloitte LLP, 2009.
- J. League. "Management Data." Available from http://www.j-league.or.jp/eng/data/index_ 03.html. Internet; Accessed 20 June 2009.
- 29. Garcia-del-Barrio, Pedro and Pujol, Francesc. "Hidden Monopsony Rents in Winner-take-all Markets-Sport and Economic Contribution of Spanish Soccer Players." *MANAGERIAL AND DECISION ECONOMICS*. Vol. 28: 57–70 (2007)
- "Collective Bargaining Agreement Between Major League Soccer And Major League Soccer Players Union December 1, 2004 – January 31, 2010." Available at http://www. mlsplayers.org/files/collective_bargaining_ agreement_final.pdf. Accessed July 19, 2009.

References

- Associated Press. "NFL salary cap increases \$12 million over 2008 figure to \$128 million." Available from http://www.nfl.com/news/story? id=09000d5d81056683&template=without-video-with-comments&confirm=true. Internet: Accessed 20 June 2009.
- Badenhausen, Kurt and Schwartz, Peter. "Major League Soccer's Most Valuable Teams." Available from http://www.forbes.com/2008/09/09/

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mls-soccer-beckham-biz-sports-cz_kb_0909mls values.html. Internet; Accessed 20 June 2009.

- Barr, Tavis and Roy, Udayan. (2008). "The effect of labor market monopsony on economic growth." *Journal of Macroeconomics*, vol. 30, May 2008, pp. 1446–1467.
- "Collective Bargaining Agreement Between Major League Soccer And Major League Soccer Players Union December 1, 2004 – January 31, 2010." Available at http://www.mlsplayers.org/ files/collective_bargaining_agreement_final.pdf. Accessed July 19, 2009.
- Cutler, David and Ferris, Ken. "FACTBOX-European clubs and the financial crisis." Available from http://sports.espn.go.com/espn/wire? section=soccer&id=3712287. Internet; Accessed 20 June 2009.
- Fitzpatrick, Jamie. "Key Points in the NHL Collective Agreement." Available from http://proicehockey. about.com/od/thenewnhl/a/salary_cap_expl.htm. Internet; Accessed 17, July 2009.
- Florio, Mike. "NFL owners vs. players: Money grab breakdown." Available from http://www. sportingnews.com/nfl/article/2008-05-23/nflowners-vs-players-money-grab-breakdown. Internet; Accessed 19, July 2009.
- Fraser v. MLS, No. 01–1296 2002. Available from http://caselaw.lp.findlaw.com/cgi-bin/getcase.pl? court=1st&navby=docket&no=011296. Internet; accessed 4 July, 2009.
- Garber, Greg. "CBA extension latest accomplishment for Upshaw." Available from http://sports. espn.go.com/nfl/news/story?id=2387218. Internet; Accessed, 17 July, 2009.
- Garcia-del-Barrio, Pedro and Pujol, Francesc. (2007). "Hidden Monopsony Rents in Winnertake-all Markets-Sport and Economic Contribution of Spanish Soccer Players." *Managerial and Decision Economics.* vol. 28: 57–70.
- Hotchkiss, Julie L and Quispe-Agnoli, Myriam. (2009). "Employer monopsony power in the labor market for undocumented workers." Federal Reserve Bank of Atlanta, Working Paper: 2009–14.
- J. League. "Management Data." Available from http://www.j-league.or.jp/eng/data/index_03.html. Internet; Accessed 20 June 2009.

- Mathias, Edward. (1999). "Big league perestroika? The implications of Fraser v. Major League Soccer." University of Pennsylvania Law Review, vol. 148(1), November 1999, p203, 35p.
- MLS Players Union. "MLS Players Union Resources." Available from http://www.mlsplayers. org/resources.html. Internet; Accessed 20 June 2009.
- Mullen, Liz. "MLB players' share of leaguewide revenue at about 52 percent." Available from http:// www.sportsbusinessjournal.com/article/60965. Internet; Accessed 20 June 2009.
- Scott, Frank A, Jr; Long, James E; Somppi, Ken. (1985). "Salary vs. Marginal Revenue Product under Monopsony and Competition: The Case of Professional Basketball." *Atlantic Economic Journal*, vol. 13(3): 50–59.
- Scully, Gerald. (1989). The Business of Major League Baseball. The University of Chicago Press, Chicago, IL.
- . (2004). "Player Salary Share and the Distribution of Player Earnings." *Managerial and Decision Economics*, vol. 25(2): pg. 77.
- Sherman Antitrust Act, 15 U.S.C. §§ 1–7. Available from "http://www.usdoj.gov/atr/public/ divisionmanual/chapter2.htm." Internet; accessed July 2, 2009.
- Sports Business Group at Deloitte. Safety in Numbers Annual Review of Football Finance. London: Deloitte LLP, 2009.
- U.S. Supreme Court: Copperweld v. Independence Tube, 467 U.S. 752 (1984) Copperweld Corp. v. Independence Tube Corp.
- Vrooman, John. (1997). "Unified Theory of Capital and Labor Markets in Major League Baseball." Southern Economic Journal, vol. 63(3): 594–619.
- . (2009). "Theory of the Perfect Game: Competitive Balance in Monopoly Sports Leagues." *Review of Industrial Organization*, vol. 34(1): 5–44.
- Wulterkens, Jason. "MLB players receive the lowest percentage of league wide revenue." Available from http://www.sportsagentblog. com/2008/03/11/mlb-players-receive-the-lowestpercentage-of-leaguewide-revenue/. Internet; Accessed 20 June 2009.