Franchise Free Agency in Professional Sports Leagues

JOHN VROOMAN
Vanderbilt University
Nashville, Tennessee

> *This isn't our doing, the free agency occurred in court. I would much prefer the Oakland Raiders to the Los Angeles Raiders and the Baltimore Colts instead of the Indianapolis Colts.*
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> —Art Modell, owner of the Baltimore Ravens, formerly the Cleveland Browns, concerning the relocation of the St. Louis Cardinals to Phoenix in 1988.

The National Football League (NFL or the League) has expanded membership only twice since its merger with the American Football League (AFL) in 1970. In the wake of each expansion decision in 1974 and 1993, there has been a series of unsettling franchise dislocations and extortions of stadium concessions from estranged NFL "home cities." The League argues that it has been rendered powerless to regulate these relocations by the adverse antitrust ruling that the NFL suffered in its failed attempt to block the move of the Oakland Raiders to Los Angeles in 1980-2. Over the same period, however, Major League Baseball (MLB) has expanded on only three occasions, and, while incumbent MLB clubs have often threatened relocation to leverage new stadia or lease concessions, not one MLB franchise has actually abandoned home since the Washington Senators became the Texas Rangers in 1972. Since the *Raiders* decisions,[1] over one-half of the franchises in the NFL have played a stadium extortion game with their home markets and, in stark contrast to MLB, about one-half of these relocation threats have been realized. According to the League, the relative frequency of relocations in the NFL derives from the antitrust immunity enjoyed by MLB throughout most of this century.[2] The remedy to the relocation revolution, in the League's opinion, requires the legislative empowerment of the NFL with an antitrust exemption similar to that held by MLB. It is argued in this paper that exemption from antitrust law is not necessary, because the NFL already holds the power to regulate the relocation of its members without threat of antitrust litigation, regardless of the *Raiders* decisions. The location of NFL clubs is inherently unstable, because franchise relocation is often in the best economic interest of a syndicated league. The ultimate source of franchise free agency in the NFL lies in the League's extensive revenue-sharing arrangements—well beyond exemption from antitrust law.

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1. The *Raiders* case was split into a liability phase: *Los Angeles Memorial Coliseum v. National Football League*, 726 F. 2d 1381 (9th Cir. 1984), *cert. denied*, 469 U.S. 990 (1984), hereinafter *Raiders I*, and a damage phase: *Los Angeles Memorial Coliseum v. National Football League*, 791 F. 2d. 1356 (9th Cir. 1986), *cert. denied*, 108 S. Ct. 92 (1987), hereinafter *Raiders II*.

2. *Federal Baseball Club of Baltimore v. National League of Professional Baseball Clubs, et al.*, 259 U.S. 200 (1922); *Toolson v. New York Yankees, Inc.*, 346 U.S. 356 (1953); and *Flood v. Kuhn*, 407 U.S. 258 (1972).
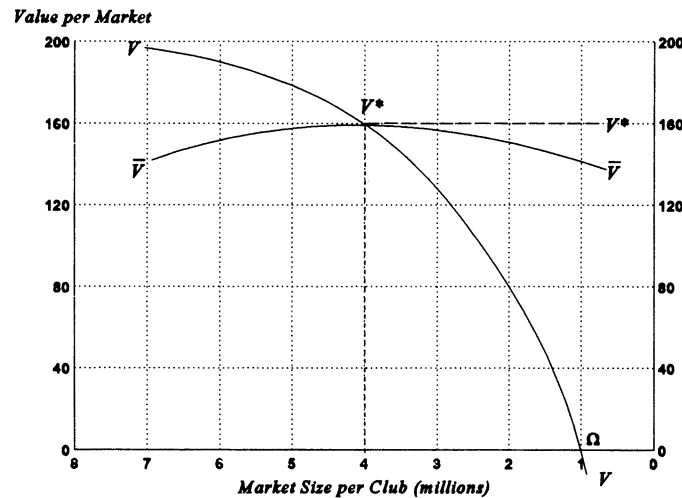
Figure 1. Optimum League Expansion (after Buchanan)

I. League Expansion Theory

Expansion Optimum

The theory of league expansion and franchise relocation developed in this paper finds its genesis in the classical club theory of Buchanan [2] and Ng [6] and seeks a formal synthesis of the unfinished arguments of Quirk [9], Quirk and Fort (QF) [4; 10], Scully [13] and Noll [7; 8]. Buchanan's original club theory suggests that, in the absence of a franchise fee, a purely syndicated (total revenue-sharing) sports league will expand into markets only to the point where the average value of clubs in the league reaches a maximum.[3] "Otherwise the existing league members would lose money by admitting the outsider, who, as a member, will share equally with the other members" [10, 299]. Subsequently, Ng [6] makes an important distinction between Buchanan's optimum, as an internal league equilibrium, and the true social optimum that considers the total welfare of potential, as well as existing league members. In contrast to the internal league equilibrium, Ng argues that the *socially* optimal league size would be reached when the total value of the league is maximized.[4] An adaptation of the argument is shown in Figure 1, where the inherent value of a sports franchise is an increasing function V of the size of its home market, and a decreasing function (by left-to-right convention) of the potential marginal expansion markets. The average value of a franchise within the league $\overline{V}$ reaches a maximum at Buchanan's optimum league size

3. In Buchanan's original club theory [2] optimal club membership was a function of cost sharing benefits and congestion costs simultaneously determined with the optimal size of the club's facility. In the league expansion theory developed here the sports league is seen as a club because of the interdependent nature of the game, and the revenue sharing among league members. The optimal size of the facility in club theory is analogous to the length of the regular playing season. Renditions of Buchanan-Ng also investigated the optimization of the number of clubs in addition to their size. This is analogous to the development of rival sports leagues.

4. "Any individual in the club (franchise in the league) must derive a total benefit from the consumption of that good (playing in the league) in excess of (or at least equal to) the aggregate marginal disutility imposed on other consumers in the club (members of the league), and the reverse must also hold for any individual not in the club (league). This condition leads to the maximization of aggregate net benefit as well as the attainment of Pareto optimality . . . Buchanan's condition, rather than being the Pareto condition, is more appropriate as the market equilibrium condition" [6, 309].

V^*.[5] Ng's optimum is shown at Ω, where the total value of the league is maximized and the value of the marginal club is equal to zero. The question of optimum league size concerns the expansion of a league beyond V^* and toward the optimum Ω.

A sports league will expand beyond V^*, if it can charge an expansion fee that indemnifies the league for any reduction in the average franchise value of its incumbent clubs. If a league does not share revenue among member clubs, however, the expansion does not impose an explicit cost on incumbent clubs.[6] In this case the optimal, non-revenue-sharing league would expand to Ng's optimum Ω in Figure 1 and charge a minimal fee. On the other hand, if the league mutually shares all of its revenue (a pure syndicate), then expansion imposes an explicit cost on the league equal to the amount by which the average value of an incumbent club V^* is reduced by the admission of the marginal club. The cost of expansion to each of the incumbent clubs is the difference in the value of the average club before and after expansion $V^* - \overline{V}$, whereas the total cost to the league is the amount by which the value of the average club before expansion exceeds the value of the marginal expansion franchise $V^* - V$. But the expansion franchise cannot be expected to pay more than its inherent market value V. "A new team would have to indemnify older teams for lost revenues and opportunities. Yet, the actual value of a team in a marginal market is too small to be worth indemnification of owners for sharing broadcast revenues and for lost bargaining power" [8, 30]. This initially suggests that a league would simply expand to the point where the value of the expansion club is equal to the cost to the league, that is, where $V = .5V^*$. While the simplicity of this indemnity criterion is intuitively appealing, it is nonetheless incomplete.

After an expansion franchise becomes a member of a sports league, its value and its ability to pay an expansion fee increase in direct proportion to the amount of revenue that is shared within the league. If revenue is not shared then the club retains the value V inherent in its home market, but if the new club becomes a member of a syndicate, then the present value of its expected cash flow is indistinguishable from any other member of the syndicated league. After paying the expansion fee, the value of the expansion club simultaneously approaches the value of the average club before expansion V^*. Therefore, as the proportion of revenue that is shared among clubs increases, the marginal cost of expansion and the compensatory fee will be higher, but so is the expected value of the expansion club and its ability to pay the higher fee. This ability-to-pay principle leads Noll [7] to suggest that expansion will be more likely in sports leagues that share a substantial portion of their revenue, such as the NFL, whereas the prospects for expansion in MLB are dim because the home club retains a larger share of its revenues. "If revenues were split evenly, substantial expansion would be possible, even taking account of the smaller expected broadcasting revenues of teams in smaller cities" [7, 131]. While this observation is insightful, it is not altogether true, because ability-to-pay is only part of the expansion picture. Although revenue sharing increases the ability of the marginal franchise to pay, it also increases the marginal cost of expansion to the league. Under revenue sharing, the values of clubs within a league become increasingly interdependent, and the costs of adding prospective members become accordingly

5. The length of the MLB season was set at 154 games in 1898 (National League) and the size of the unrivaled NL was reduced from 12 to 8 clubs in 1899. This critical mass of eight teams created a desired competitive balance, but vacating 4 markets allowed the formation of the rival American League in 1900. The merger of the AL and NL in 1903 created a stable format of two eight-team leagues that played 154 game seasons until the expansion of 1961. The optimum league size V^* is analogous to this critical league mass of eight teams arbitrarily set at a market population of 4 million.

6. There are various implicit costs and externalities in league expansion. These include the increasing cost of playing talent and the loss of leverage from franchise scarcity in the extortion of stadium concessions and franchise fees. These costs are offset somewhat by strategic gains from expansion in terms of preemption of the formation of rival leagues.

heightened. A complete league-expansion theory should consider both the indemnity and ability-to-pay aspects of this revenue interdependence.

A synthesis of league expansion arguments can be accomplished through a simple model of an n-team league in which each member-team i retains an α share of its own revenue, and receives a $(1 - \alpha)$ share of the net revenue earned by the other $n - 1$ clubs in the league.[7] Let V_i denote the value of the ith franchise with net revenue R_i in the n-team league with a total revenue R_T. If ρ is the discount rate, then the value of the ith club becomes:

$$V_i = 1/\rho\{\alpha R_i + [(1 - \alpha)/(n - 1)][R_T - R_i]\}. \tag{1}$$

If team i has the average franchise value V^*, such that $R_i = R_T/n$, then:

$$V^* = 1/\rho\{[\alpha R_T/n] + [(1 - \alpha)/(n - 1)][R_T - (R_T/n)]\} = 1/\rho(R_T/n). \tag{2}$$

Now, consider the expansion of this league into the market j with the inherent net revenue potential R_j and franchise value V_j, such that $V_j = R_j/\rho$. Let V_j' indicate the value of the expansion club after it enters the league, and V_i' denote the value of the average club in the league after expansion into the market j. After league expansion, the value of the ith incumbent club and the jth expansion franchise can be represented as:

$$V_i' = 1/\rho\{\alpha R_T/n + (1 - \alpha)/n[R_T + R_j - R_T/n]\}$$
$$= \alpha V^* + [(1 - \alpha)/n]V_j + [(1 - \alpha)(n - 1)/n]V^* \tag{3}$$

$$V_j' = 1/\rho[\alpha R_j + (1 - \alpha)R_T/n] = \alpha V_j + (1 - \alpha)V^*. \tag{4}$$

The reduction in the value of the average incumbent club i due to expansion becomes:

$$V^* - V_i' = V^* - \alpha V^* - [(1 - \alpha)/n]V_j - [(1 - \alpha)(n - 1)/n]V^*$$
$$= (1 - \alpha)\{V^* - [(n - 1)/n]V^* - V_j/n\}$$
$$= (1 - \alpha)(V^* - V_j)/n \tag{5}$$

and the total cost to the n-team league is simply:

$$n(V^* - V_i') = (1 - \alpha)(V^* - V_j). \tag{6}$$

The expansion cost per incumbent club (5) is the vertical difference $V^* - \overline{V}$ in Figure 1, and the total cost to the league (6) is the difference $V^* - V$. Optimal expansion requires that the new club compensate the league for its reduction in value (6), and that the expansion fee F_j not exceed the value of the expansion franchise (4):

$$F_j = V_j' = \alpha V_j + (1 - \alpha)V^* = (1 - \alpha)(V^* - V_j). \tag{7}$$

This requires $V_j = 0$ and $F_j = (1 - \alpha)V^*$ and yields an expansion optimality proposition.

7. The thorough and insightful comments of an anonymous referee have significantly improved this paper, in general, and this model, in particular. Originally, the logical progression of the model was weakened by intuitive leaps, which have since been bridged by the referee's suggested reformulations the cost of expansion to the average member-club in (3) (4) and (5).
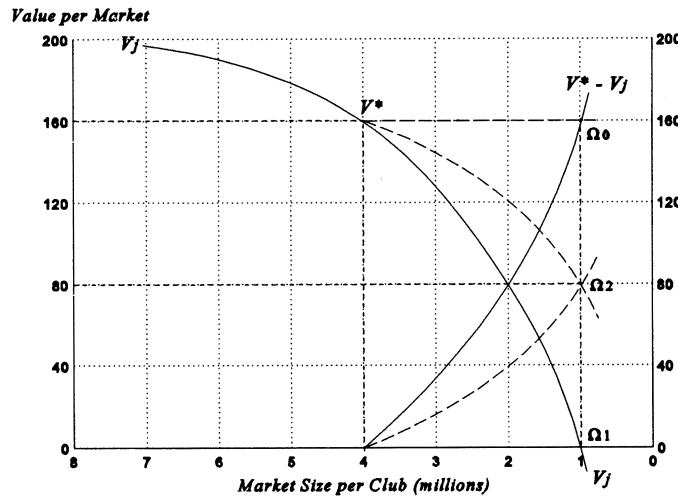
Figure 2. General Optimum Expansion

PROPOSITION 1. *Optimal expansion requires that a league maximize its total value by admitting every potentially profitable expansion hopeful, regardless of the revenue sharing arrangements among clubs in the league. The compensatory expansion fee that must be charged to yield the social optimum is equal to the amount of revenue that is shared by the average franchise within the league* $(1 - \alpha)V^*$.

The general expansion theorem is demonstrated in Figure 2, where V_j is an increasing function of market size and a decreasing function of available marginal expansion sites. Expansion optimality (7) is shown at Ω_0 for $\alpha = 0$ at Ω_1 for a nonsharing league ($\alpha = 1$), and at Ω_2 for a league that shares half of its revenue ($\alpha = .5$). The left hand side of (7) is the set of curves that reflects the postexpansion value of the expansion club (its ability to pay) and the right hand side of (7) is the family of curves indicating the cost of expansion to the league. In general, each expansion optimum requires $V_j = 0$ and $F_j = (1 - \alpha)V^*$ for $1/n \leq \alpha \leq 1$.

The question has arisen in *Raiders I* and *II* as to whether it is optimal for a league to expand by duplication of franchises in currently occupied markets. In the case of two-team markets, consider the equilibrium duopoly value of an incumbent club with a preexpansion value of V_j and its postexpansion duplicate V_j' such that:

$$V_j' = \alpha\lambda V_j + (1 - \alpha)V^* \tag{8}$$

where λ is the share of the postexpansion market j controlled by each of the duopoly clubs. The value V_i' of the other nonduplicated clubs within the league after dual-market expansion becomes:

$$V_i' = \alpha V^* + [(1 - \alpha)(n - 1)/n]V^* + [(1 - \alpha)/n](2\lambda - 1)V_j. \tag{9}$$

The reduction in value of the duplicated club can be derived as:

$$V_j - V_j' = \alpha V_j + (1 - \alpha)V^* - \alpha\lambda V_j - (1 - \alpha)V^* = \alpha(1 - \lambda)V_j. \tag{10}$$

The total reduction in the value of the n incumbent teams in the league becomes:

$$n(V^* - V_i') + (V_j - V_j') = (1 - \alpha)[V^* - (2\lambda - 1)V_j] + \alpha(1 - \lambda)V_j. \tag{11}$$

Optimality requires that the new club should have sufficient value to compensate the league for these costs. The combination of (8) and (11) yields the efficiency condition:

$$V_j' \geq n(V^* - V_i') + (V_j - V_j')$$
$$\alpha\lambda V_j + (1 - \alpha)V^* \geq (1 - \alpha)V^* - (1 - \alpha)(2\lambda - 1)V_j + \alpha(1 - \lambda)V_j$$
$$\lambda \geq .5. \tag{12}$$

The expansion club can, therefore, pay the expansion indemnity *if only if* $\lambda \geq .5$, which is highly improbable in conventional duopoly theory.[8] The dual-market theorem and its relocation corollary are immediate.

PROPOSITION 2. *The value of an expansion franchise placed in any market, which is currently occupied by another franchise of the league, is not sufficient to compensate all of the incumbent clubs within the league (including the duplicated club) for the loss of value due to expansion. League expansion in the form of the duplication of an existing club is, therefore, inferior (suboptimal) to single-market expansion. This is true regardless of market size, league size or revenue sharing arrangements within the league.*

Conversely, the total gains to a league from the relocation of a duplicate franchise will outweigh the gains from expansion if $(1 - 2\lambda)V_j > 0$, which is true for any profitable franchise location $V_j > 0$ and conventional duopoly solution $\lambda < .5$. The converse of the dual-market theorem serves as its corollary.

COROLLARY. *The gains to a league (including the duplicated clubs) from the relocation of a duplicate franchise from a two-team market to a marginal expansion site are greater than the potential expansion value of that site. The relocation of a dual-market franchise is, therefore, superior to conventional expansion. This is true regardless of market size, league size and revenue sharing arrangements of the league.*

The expansion decisions of a rival league into an occupied territory, however, are not adversely affected by the reduced value of the incumbent club. This yields a rival league expansion theorem.

PROPOSITION 3. *While the expansion of a league into its own occupied territories is necessarily suboptimal, the expansion of a rival league into an occupied territory is not. A rival league will expand into an occupied market, if the value of the market after expansion is greater than any available expansion site $(\lambda V_i > V_j)$. Rival leagues will, therefore, be comprised of member-clubs from both ends of the spectrum of market size.*

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8. If the original club maximizes the profit potential of its market, then the value of the original franchise will always (in absence of collusion) exceed the combined value of the duplicate franchises after expansion, that is $\lambda < .5$. Duopoly solutions range from Cournot's original $(\lambda = 1/(n + 1)) = .33$ to the collusion solution of $\lambda = .5$. QF also state this condition. "Since the original team presumably would have acted so as to maximize profits subject to the demand for the sport at its location, it is to be expected that the total profits at the location (summed over both teams) will fall after entry" [10, 301].

Expansion Equilibrium

Due to the monopoly power of sports leagues, however, it seems highly unlikely that optimal expansion conditions will be met.[9] If the league charges a uniform expansion fee, then franchises from intermediate-sized markets may enter the league for less than they would have been willing to pay (the value of their franchise) and pay more than their actual cost to the league. In Figure 2, the total expansion surplus S_T is the triangular integral between the expansion club's value function (4) and the league's cost function (6):

$$S_T = \int_{-m}^{+m} [\alpha V(m) + (1 - \alpha)V^* - (1 - \alpha)V^* + (1 - \alpha)V(m)]dm = \int_{-m}^{+m} V(m)dm \quad (13)$$

evaluated between Buchanan's optimum market $-m$ and Ng's optimum market $+m$. While the value of the total surplus is invariant with respect revenue sharing within the league, the relative shares of this surplus captured by the league S_L and the expansion franchise S_F are not. The league's share of the surplus S_L is the amount by which the expansion fee exceeds the expansion cost:

$$S_L = \int_{-m}^{+m} [(1 - \alpha)V^* - (1 - \alpha)V^* + (1 - \alpha)V(m)]dm = (1 - \alpha) \int_{-m}^{+m} V(m)dm \quad (14)$$

whereas the expansion clubs garner the residual S_F between the value of the club's home market and the fee:

$$S_F = \int_{-m}^{+m} [\alpha V(m) + (1 - \alpha)V^* - (1 - \alpha)V^*]dm = \alpha \int_{-m}^{+m} V(m)dm. \quad (15)$$

All of the expansion surplus is, therefore, captured by the new clubs in a nonsharing league ($\alpha = 1$), most of the expansion surplus is gained by the league in a pure syndicate ($\alpha = 1/n$), and the surplus is shared evenly by the 50/50 league and its expansion clubs ($\alpha = .5$). In league-expansion *equilibrium,* a monopoly league will seek to maximize its share of this expansion surplus.

A monopoly league would maximize its share of the surplus if it set the expansion fee and limited league size such that the marginal expansion value of a club is equal to its marginal expansion cost *to the league.* Consider the hypothetical expansion a league that shares half of its revenue. For simplicity, the value and cost functions of the league are depicted in Figure 3 as linear functions for $\alpha = .5$. Equilibrium expansion requires:

$$2\alpha V_j + (1 - 2\alpha)V^* = (1 - \alpha)(V^* - V_j) \quad (16)$$

and $V_j = [\alpha/(1 + \alpha)]V^*$. The monopoly league would set the expansion fee at the value of the marginal franchise in equilibrium at π in Figure 3:[10]

$$F_j = \alpha V_j + (1 - \alpha)V^* = \alpha[\alpha/(1 + \alpha)]V^* + (1 - \alpha)V^* = V^*/(1 + \alpha) \quad (17)$$

where $F_j = .67V^*$ and the equilibrium expansion costs at γ are $[(1 - \alpha)/(1 + \alpha)]V^* = .33V^*$

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9. If vacant expansion sites are contestable (favorable for expansion by rival leagues) then a monopoly league may expand toward the optimum in order to preempt the development of a rival league.

10. The marginal value function has twice the slope of the linear value function, and in the case of $\alpha = .5$, the marginal expansion value function becomes the original value function *in situ:* $2\alpha V_j + (1 - 2\alpha)V^* = V_j$.
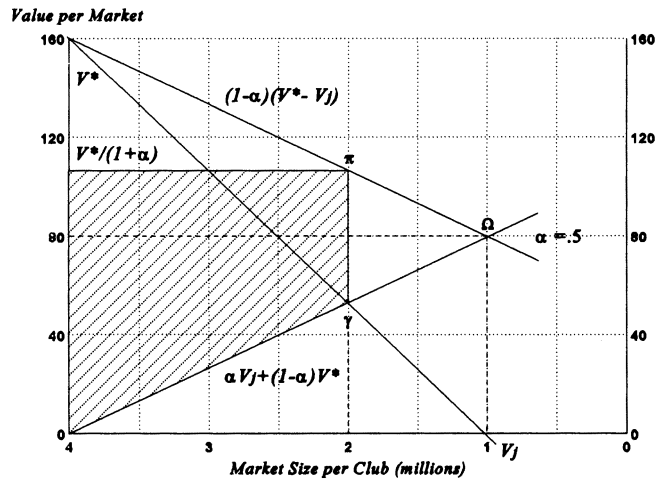
Value per Market

Figure 3. Equilibrium Expansion

for $\alpha = .5$. The league's surplus is the shaded area by which the expansion fee F_j exceeds the marginal cost of expansion.

While the socially optimal league size is invariant with respect to revenue sharing (Proposition 1), it is apparent that the conditions for league-expansion *equilibrium* are highly sensitive to revenue interdependence within the leagues. Consider, for example, the potential effects of the extensive revenue sharing arrangements of the NFL, where clubs share approximately 75 percent ($\alpha = .25$) of their total revenue in comparison with MLB, where clubs retain about two-thirds of their total home market revenue ($\alpha = .67$).[11] Comparative expansion equilibria are shown in Figure 4 at π and π' for the hypothetical MLB and NFL, which differ only in their revenue and expansion cost interdependence ($\alpha = .67$ for MLB and $\alpha = .25$ for NFL). The NFL would set its monopoly equilibrium expansion fee and limit expansion at π' where $F_j = V^*/(1 + \alpha) = .8V^*$, and the equilibrium expansion cost to the NFL at γ' is $[(1 - \alpha)/(1 + \alpha)]V^* = .6V^*$. By comparison, MLB would set its equilibrium expansion fee and limit expansion at π where $F_j = .6V^*$ and the expansion cost to MLB is $.2V^*$ at γ.

In general equilibrium, the monopoly expansion solution can be simplified. If expansion equilibrium requires $V_j = [\alpha/(1 + \alpha)]V^*$, then $\alpha V_j + (1 - \alpha)V^* = V^* - V_j$, which implies: $V'_j = V^* - V_j$. These general equilibria (π for MLB and π' for the NFL) are shown in Figure 4, where the value functions of the two leagues (V'_j) are equal to the respective marginal costs of expansion

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11. Recall that α is the share of a club's total home market revenue that is retained by the club and that $(1 - \alpha)$ is the portion of total revenue mutually shared with the league. For the NFL in 1995, gate, media and stadium revenues were, on average 28 percent, 40 percent and 9 percent of total revenues (the remaining revenue came from NFL licensing fees that are shared equally). Each NFL club retains 60 percent of its gate, its local media revenue (about 5 percent of total media), and all of its stadium revenue (including luxury seating). All of the national media fees, 40 percent of the gate and all licensing fees are shared equally irrespective of market size. This implies that 27.8 percent of the total revenue of the average NFL club actually reflects its home market (16.8 percent from its gate, 2 percent from its local media, and 9 percent from stadium sources). For MLB in 1995, gate, media and stadium revenues were about 40 percent, 36 percent and 20 percent of an average team's total revenue, respectively. Each AL club keeps 80 percent and each NL club about 90 percent of its gate; about 40 percent of total media is local, of which an additional 20 percent is shared; and a club keeps its stadium revenue. This implies that 66 percent of the total revenue of the average MLB club actually reflects its home market (34 percent from its gate, 12 percent from local media and 20 percent from stadium sources). See Vrooman [17].
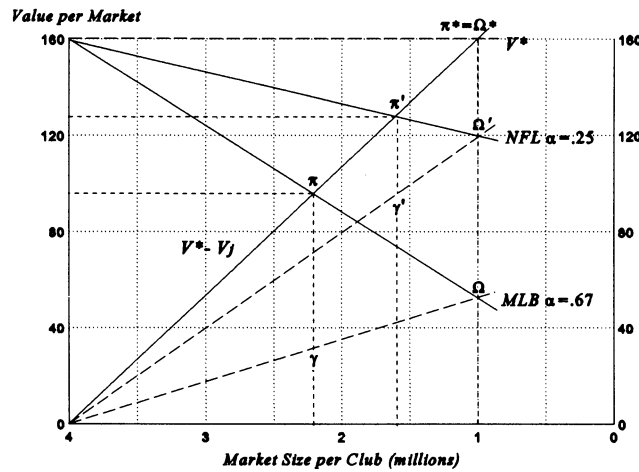
Figure 4. General Equilibrium Expansion

in situ $(V^* - V)$. Comparative analysis of the NFL and MLB yields additional insight into the effects of revenue sharing. In general equilibrium, the monopoly expansion fee is $[1/(1 + \alpha) - (1 - \alpha)]V^* = [\alpha^2/(1 + \alpha)]V^*$ higher than that required for social optimality (26.8 percent and 5 percent for MLB and the NFL, respectively). Furthermore, the monopoly league would expand into $1/(1 + \alpha)$ of the markets beyond Buchanan's optimum that are required for social optimality (60 percent and 80 percent for MLB and the NFL). The monopoly league also captures $1/(1+\alpha)$ share of the expansion surplus. In equilibrium, the monopoly league's share approaches the total expansion surplus as the degree of revenue sharing increases. This leads to a general equilibrium expansion proposition.

PROPOSITION 4. *The profit maximizing decisions of sports leagues will generate an expansion equilibrium, in which franchise fees are $\alpha^2/(1+\alpha)$ higher and a league expansion that is $\alpha/(1+\alpha)$ smaller than required for social optimum. The degree of social inferiority of monopoly equilibrium expansion is, therefore, inversely proportional to the percentage of revenue shared $(1 - \alpha)$ among teams in the league.*

This implies that, in equilibrium, the expansion of MLB is inferior to the expansion of the NFL. Ironically, the expansion equilibrium of the pure syndicate $(\alpha = 1/n)$ would approach the social optimum, where the total value of the league would be maximized at Ω^* in Figure 4.[12] If the objective of the league is to maximize its share of the expansion surplus, then the true monopoly league would strategically seek to become the pure syndicate. A revenue sharing theorem then follows directly from Proposition 4.

PROPOSITION 5. *If the share of the expansion surplus that is captured by the league is directly related to the portion $(1 - \alpha)$ of a club's revenue that is shared, then a monopoly league would alter its revenue sharing arrangements so as to maximize its share of the expansion surplus. The true monopoly league would, therefore, become the pure syndicate $(\alpha = 1/n)$.*

12. This is consistent with QF. "If leagues were organized as syndicates (they) would expand into every location that would increase total profits to the league. Expansion fees would be charged that essentially would transfer all rents to the league . . . This might still leave some potentially profitable locations available, . . . because the existing league would take into account . . . the threat value of vacant locations in extracting subsidies from local governments [4, 1293]."
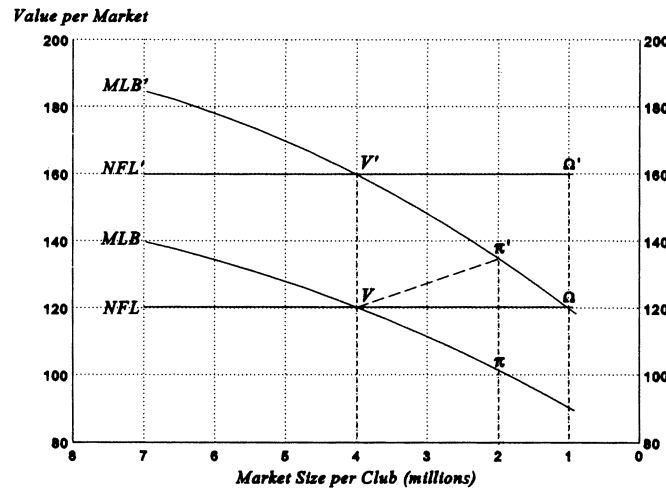
Figure 5. The Extortion Triangle

Extortion and Relocation

Franchise instability of professional sports leagues arises from gaps along the expansion continuum that result from the disjointed enhancement of potential revenue streams among existing and potential league markets. A meaningful league expansion theory should also explain these destabilizing forces of franchise relocation. Consider again the comparison of the hypothetical *MLB* and *NFL* shown in Figure 5 with initial expansion equilibria at π and Ω, where each equilibrium reflects the revenue sharing arrangements of the respective leagues. For simplicity of exposition, assume that the leagues have the same initial average value at V.[13] Now allow these equilibria to be disturbed by a potential increase in franchise values due to differences in relative stadium quality and lease conditions among the clubs in these markets. If each market were augmented by a new stadium with equally favorable lease conditions, then the respective *potential* value functions would shift upward by an assumed 30 percent to MLB' and NFL'. If all existing and potential clubs enjoyed new stadia and similar sweetheart leases then the relative equilibria of the two leagues would be restored at π' and Ω' for MLB and the NFL in accordance with the theory developed above. The instability in the evolution of sports leagues derives from the process whereby each existing and potential league member seeks to improve its current position along either *MLB* or *NFL* to one of many possible positions along their respective potential value functions MLB' or NFL'. Because of significant sunk cost in the provision of sports venues, the equilibration mechanism for the leagues becomes an opportunistic process of stadium extortion by the clubs with the threat of franchise relocation.

There are two economic reasons why a franchise would choose to relocate. First, a highly leveraged club owner may experience significant cash flow problems from excessive debt. If the leveraged owner does not want to sell the franchise, then relocation may be a preferred alternative method of disgorging cash from franchise equity [18]. Second, a club owner would vacate his or her original market for a more valuable market, but only if all potential value increases had been exhausted from the original market. Rather than moving to π' in Figure 5, the owner of club V

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13. While the average revenues of MLB and NFL clubs are similar, the variance of MLB revenue among clubs is much wider than the NFL. The capitalized values of NFL franchises are, therefore, higher than those in MLB. According to *Financial World* in 1996, the average NFL franchise had a value of $175M, and the average MLB franchise, $115M.

Table I. Payoff Matrix for Extortion and Relocation with Reverse Expansion

	Extortion and Expansion (1)	Relocation and Reverse Expansion (2)	Net Relocation Gains over Extortion (3) = (2) − (1)
Club Gains	$\alpha(V' - V) + \pi'/n$	$\alpha(\pi' - V) + V'/n$	$-(\alpha - 1/n)(V' - \pi')$
Rest of League	$(1 - \alpha)(V' - V) + \pi'(n - 1)/n$	$(1 - \alpha)(\pi' - V) + V'(n - 1)/n$	$(\alpha - 1/n)(V' - \pi')$
Total Gains	$(V' - V) + \pi'$	$(\pi' - V) + V'$	0

would obviously prefer to remain in the original market and play in a new stadium where the value of the franchise would be enhanced to V'. Similarly, the owner of the marginal franchise at π would prefer a new park with a sweetheart lease at π' to the confines of V (unless there was the possibility of V'). The potential gains of $V' - V$ and $\pi' - \pi$ create the extortion triangles V-π'-V' and π-V-π', where the uppermost vertices are the preferred results of extortion and the middle vertices are the second best outcomes. The middle vertices of the triangles serve as fulcra in the leveraged extortion of stadium concessions from the respective markets.

Simple franchise relocations, such as the move from V to π' in Figure 5, or reverse relocation, such as the move π to V, are not difficult to predict, but it is important to realize that both the league and the club benefit from such moves.[14] The value of the club is enhanced by $\alpha(V - \pi)$ or $\alpha(\pi' - V)$, whereas the league's share of the gains is $(1 - \alpha)(V - \pi)$ or $(1 - \alpha)(\pi' - V)$. Marginal expansion locations at π' will become attractive candidates for relocation if $\pi' > V$, and each vacated market site V will be reoccupied along the continuum between Buchanan's optimum and expansion equilibrium if $V > \pi$. The optimality aspects of franchise relocation, however, become complicated if these relocation sites have potential value to the league as expansion sites. Social optimality requires that the league be indemnified for the lost value of its expansion opportunity.

Consider first the more probable case of a threatened relocation of V to the marginal market with a new stadium enhancement to π'. Table I is the club-league payoff matrix for the extortion triangle V-π'-V'. Under Outcome 1 the threat of the relocation of V to π' successfully forces the original home market to build a new park and make lease concessions consistent with the augmented revenue stream at V'. The league may hold the available site at π' open as a pawn for further relocation threats, but the counterthreats of a rival league, litigation from π, or legislative action will ultimately force league expansion into π'. The club will have its new park at V', and the league will retain its opportunity to expand into π'. If the extortion threat fails (Outcome 2), then the club would relocate to π', and the league would gain the original site with the potential reverse expansion value of V'. The relative gains of the club to those of the league under either outcome are proportional to the share of the revenue retained by the club. Ultimately, the total gain of the extortion-relocation-expansion game is $V' - V + \pi$, regardless of Outcome 1 or 2, but clearly the club prefers a successful extortion Outcome 1, whereas the league prefers Outcome 2 and relocation. The size of the club's gain from staying in a potential new stadium at V' outweighs that of relocation by $(\alpha - 1/n)(V' - \pi')$.

Obviously, the club's extortion gain varies inversely with the amount of revenue that is shared

14. In his early study, Quirk observes, "With a franchise located in a city with relatively poor revenue potential, it is clearly in the best interest of the franchise owner to move to a city with higher revenue potential . . . Since the owner wishing to move feels that he will personally benefit from the move, this is prima facie evidence from the best possible source that there will be financial benefit for the other owners as well, in the form of higher visiting gate receipts [9, 46]."

Table II. Payoff Matrix for Extortion and Expansion with Reverse Relocation

	Extortion and Expansion (1)	Relocation and Reverse Expansion (2)	Net Relocation Gains over Extortion (3) = (2) − (1)
Club Gains	$\alpha(\pi' - \pi) + V'/n$	$\alpha(V' - \pi) + \pi'/n$	$(\alpha - 1/n)(V' - \pi')$
Rest of League	$(1 - \alpha)(\pi' - \pi) + V'(n - 1)/n$	$(1 - \alpha)(V' - \pi) + \pi'(n - 1)/n$	$-(\alpha - 1/n)(V' - \pi')$
Total Gains	$(\pi' - \pi) + V'$	$(V' - \pi) + \pi'$	0

with other clubs, but so does the expected difference between V' and π'. As the degree of revenue interdependence increases, then the values of the markets within the league become indistinguishable.[15] As π' approaches Ω' in Figure 5, a club in a syndicated league becomes increasingly indifferent about staying for V' or leaving for Ω'. Conversely, in a league where the club retains a larger share of its revenue, the value of a club remains dependent to that extent on the value inherent in its original market. This leads to an initial proposition about extortion and relocation.

PROPOSITION 6. *A franchise will prefer extortion of stadium or lease concessions in its existing market (Outcome 1) to relocation in direct proportion to the amount of a club's revenue that is retained. A league will prefer relocation and reverse expansion (Outcome 2) in direct proportion to the revenue retained by the club. As a result, clubs will negotiate more actively with original markets, be less likely to relocate, and the league will be less likely to resist relocation in a direct proportion to the revenue share retained by the club.*

The specific question has arisen in *Raiders II* as to the compensation to a league from a relocating club for a lost expansion opportunity. Under Outcome 1 the league gains a share of the stadium extortion $(1 - \alpha)(V' - V)$ and retains the value of its potential expansion opportunity. Under Outcome 2 the league loses the expansion opportunity π', but gains the more valuable opportunity V'. The league is not damaged under either case and is actually better off after the relocation. The relocation-compensation corollary then follows.

COROLLARY. *If the relocation of a franchise is from a potentially more valuable site to a less valuable site (V to π' in Figure 5), then the value of the league's expansion opportunity has increased from the relocation (π' to V'), and the league is not entitled to indemnification (a relocation fee) for the loss of that expansion site.*

Now comes the complication of a maverick club from a smaller market π, who backfills a vacant internal expansion site through reverse relocation. The vacant site at V initially creates the extortion triangle π-V-π' for the smaller market club. If the market V has been left vacant by the league for a sufficient amount of time, then V can possibly be extorted into a new stadium or lease concessions. The league may use the delaying strategy to extract a monopoly franchise fee, whereas the maverick club can usurp the expansion opportunity and merge the extortion of the original market with relocation and extortion of the vacant market. The double extortion threat by the smaller market club creates the obtuse extortion triangle π-V'-π' in Figure 5. Table II is the payoff matrix for reverse-relocation and expansion. If the club has the first move, then the gains from the extortion triangle V-π'-V' will dominate the initial triangle π-V-π'. The negotiations with the original market will not be conducted in good faith, as they are used only to extract

15. If V is an average club and π is a marginal equilibrium club, then $(V' - \pi') = [\alpha/(1+\alpha)]V'$, where $\lim_{\alpha \to 0} [\alpha/(1+\alpha)]V' = 0$. In this event the preferred result V' and the second best outcome Ω' have an equal value.

V' from the vacant site. As a negotiation tactic, the club may even relocate to V before the V' concessions are made. The rest of the league clearly prefers the club's extortion of its original market π', and league's take-it-or-leave-it expansion into the vacated site at V'. The loss to the league caused by the relocation, however, is not equal to the total difference in the potential value of the sites $(V' - \pi')$, because the rest of the league still shares in the value gained by the maverick club at V'. The relocation indemnity that should be paid to the league is equal only to the fraction of the difference in the two sites that is expropriated by the club: $(\alpha - 1/n)(V' - \pi')$ for the n-team league. This yields a final proposition concerning reverse relocation.

PROPOSITION 7. *If a franchise relocates from a smaller market π' to a more valuable internal market V', then the value of the league's expansion opportunity is diminished by the amount of the expansion differential captured by the club. The amount of the indemnity is, therefore, inversely proportional to the amount of revenue that is shared. The league is entitled to an indemnity (relocation fee) equal to only $(\alpha - 1/n)(V' - \pi')$.*

II. The Dual-Market Shakedown

Major League Baseball

The evolution of MLB in this century is characterized by punctuated equilibrium. During the fifty years following the merger of the American and National Leagues in 1903, there were no expansion or franchise moves, until the emergence of televised games during the 1950s.[16] After eleven franchise moves in the two decades after 1953, franchise stability was restored, and there have been no relocations in MLB since the Washington Senators became the Texas Rangers in 1972. Relocation and expansion moves of MLB since the impact of the media-game are shown in Table III. In these relocation moves, club owners were either pushed by financial distress or insolvency, or were simply drawn to locations that had become more profitable with the revenue enhancement of television.[17] In accordance with the dual-market theorem (Proposition 2), almost all of the franchise moves in this punctuation period were the result of an oversaturation of multiple-team markets by the television medium.

Financial distress forced the first three MLB moves from the two-team markets of Boston, St. Louis and Philadelphia, and the profit squeeze was attributed to the dilution of a clubs market share by television. Lou Perini, owner of the Boston (Milwaukee) Braves, who were the first to move in 1953, explained that "since the advent of television, Boston has become a one-team city."[18] Before the Brooklyn Dodgers and New York Giants bolted for the West Coast in 1958,

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16. The American League had begun in 1900 from the nucleus of the Western League (minor) and in 1901 the AL invaded the NL markets of Philadelphia and Boston and occupied the sites vacated by the NL in 1900: Baltimore, Washington, Cleveland and Detroit and declared itself a rival major league. The National Agreement of 1903 ended the ensuing war and the AL and NL would operate as separate but equal major leagues bound by the same rules and schedules, with mutually recognized territories and player contracts and reserve clauses.

17. In his personal recollection Bill Veeck [16] divides this period of "floating franchises" into three phases. The first phase involved the "logical and probably inevitable" breakup of the weakest of the two-team markets: Boston, St. Louis and Philadelphia in the quest for competitive balance. Phase two was the "floating crap game" or "land grab" that had nothing to do with league balance, but rather the simple availability of more profitable locations on the West Coast for the Dodgers and Giants. The third phase was for-profit moves from the one-team towns of Milwaukee and Kansas City.

18. Bill Veeck's attempts to move the Browns to Baltimore were approved by AL owners only after Veeck sold the club to a Baltimore group for $2.475 million. After AL owners rejected the bid of a Philadelphia group to buy the Athletics the Club was sold by the Connie to move family to Arnold Johnson for $6.7 million who then moved it to Kansas City.

Table III. Franchise Expansion and Relocation in Major League Baseball

Date		Relocation (R) or Expansion (X) Franchises	Expansion Fee ($mil)
1953	R	Boston Braves to Milwaukee (NL)	—
1954	R	St. Louis Browns to Baltimore Orioles (AL)	—
1955	R	Philadelphia Athletics to Kansas City (AL)	—
1958	R	Brooklyn Dodgers to Los Angeles (NL)	—
	R	New York Giants to San Francisco (NL)	—
1961	X	Expansion Los Angeles Angels (AL)	2.18[a]
	X	Expansion Washington Senators (AL)	2.15
	R	Washington Senators to Minnesota Twins (AL)	—
1962	X	Expansion New York Mets (NL)	1.80[b]
	X	Expansion Houston Colt 45's (NL)	1.85
1965	R	Los Angeles Angels to Anaheim (AL)	—
1966	R	Milwaukee Braves to Atlanta (NL)	—
1967	R	Kansas City Athletics to Oakland (AL)	—
1969	X	Kansas City Royals (AL)	5.25[c]
	X	Seattle Pilots (AL)	5.25
	X	Montreal Expos (NL)	10.00
	X	San Diego Padres (NL)	10.00
1970	R	Seattle Pilots to Milwaukee Brewers (AL)	—
1972	R	Washington Senators to Texas Rangers (AL)	—
1977	X	Expansion Seattle Mariners (AL)	6.25[d]
	X	Expansion Toronto Blue Jays (AL)	7.00
1993	X	Expansion Colorado Rockies (NL)	95.00[e]
	X	Expansion Florida Marlins (NL)	95.00
1998	X	Expansion Arizona Diamondbacks (NL)	130.00[f]
	X	Expansion Tampa Bay Devil Rays (NL)	130.00

a. In an expansion draft the Angels and Senators selected 28 players at $75K each; the Angels chose another 3 and Senators, 2 at $25K. The average player salary in 1961 was about $15K.

b. The Mets and Colt 45's each drafted 16 players at $75K; the Mets took 2 and the Colts, 3 at $50K and both chose 4 players at $125K.

c. The Royals and the Pilots selected 30 players at $175K apiece; the Expos and Padres chose 30 players for a flat fee of $10M. The average player's salary in 1969 was $25K.

d. The Mariners and Blue Jays received no TV share from 1977–9 ($3M). Each selected 30 players at $175K apiece. Average MLB salary in 1976: $50K.

e. The Rockies and Marlins received no TV share in 1993 ($13M). Each drafted 36 players from both leagues for flat fee of $95M: $21M to 14 AL clubs and $74M divided among 12 NL clubs. Average MLB salary in 1992: $1.1M.

f. The Diamondbacks and Devil Rays receive $5M less of a TV share in 1998–2003 ($25M).

270 games were being locally televised, including 231 home games for the three New York clubs in 1957.[19] Due largely to the double occupancy of the Baltimore-Washington market, the Washington Senators moved to a smaller Minneapolis market in 1961 for $320K more in media rights fees. In a second move, the Braves left the confinement of the tripled Milwaukee-Chicago area in 1966 for Atlanta, a city the same size as Milwaukee, for $800,000 more in annual media reve-

19. Another important drawing factor was the prospects of playing in new stadia. The Braves went to a $5 million County Stadium in Milwaukee in 1953 with a rent of $1,000 per year for the first two years and five percent of the gross thereafter, and then jumped to the $18 million 50K-seat Fulton County Stadium in Atlanta in 1966 with $500,000 in moving costs. The Dodgers traded minor league Wrigley Field for 300 acres in Chavez Ravine, and Los Angeles provided $2 million infrastructure. The Senators were "guaranteed" an average 750K attendance for the first five years to move into the enlarged Metropolitan stadium. According to the referee, who is familiar with the Twins, rent was not due until the club drew 3.75 million. "The Twins did receive an escape clause in the contract they signed when they moved to the Metrodome, however, and will exploit this to the full in their demands for a new baseball-only stadium." The Rangers (Senators II) were charged $1 per year rent in Texas until they drew 1 million fans.

nue.[20] The expansion (replacement) of the new Senators into the Baltimore-Washington market was predictably a financial failure, and the redoubled Senators relocated to Dallas-Ft. Worth in 1972. The underlying forces of the Senators' move to Texas were similar to those of the Braves' move to Atlanta. The saturation of multiple-team media markets had diminished a duopoly team's λ share of its home market (Proposition 2), and in each case the more highly leveraged and under-capitalized club was forced to sell or to move the franchise. The only MLB moves not made in accordance with the dual-market theorem were the relocation of the Kansas City Athletics to Oakland in 1968 and the move of the bankrupt Seattle Pilots to Milwaukee in 1970. In characteristic fashion, MLB preempted the complications of reverse relocation. The vacancies created by these relocations were expeditiously refilled by AL expansion into Kansas City (Royals) in 1969 and Seattle (Mariners) in 1977. Following these moves that defied dual-market logic, the Oakland, San Francisco and Milwaukee clubs all struggled financially in their multiple-team markets.

MLB has been reluctant to expand the leagues until it has been threatened, either by a rival league or by possible litigation from abandoned municipalities. There are three keys to understanding MLB expansion: (1) the underemphasized preemptive role of MLB's minor league system, (2) the unbalanced restraints of the unanimity expansion voting rule of the NL, and (3) the understated rivalry between the National and American Leagues. Although the minor leagues created an up-and-running rival at the turn of the century (the AL was formed from the Western League in 1900), the existence of the minors (controlled by MLB) has served as a formidable buffer against potential rivals.[21] Following the departure of the Dodgers and Giants from New York City in 1958, the Continental League was formed on paper as a strategy to force MLB to refill the New York market, then occupied only by the AL Yankees. When the City of New York approved the funding for a new stadium in Queens (later Shea Stadium) in 1959, the CL's paper threat became credible. In 1960 the NL and AL agreed to expand into four of the eight original CL locations.[22] The NL moved first, expanding into New York (Mets) and Houston (Colt .45s) markets in 1962. Ten days later the AL broke the three-league agreement and unilaterally announced plans to put franchises in Los Angeles (Angels), and Washington (Senators), and that its Washington club would move to Minneapolis (Twins) in 1961. The assignment of a duplicate AL club to the Los Angeles market, occupied by the NL Dodgers, was clearly in retaliation to the NL's intrusion into the Yankee's monopoly market in New York. According to the rival-league theorem (Proposition 3), these economically distinct and politically separate major leagues were acting as rivals in their duplication of large-market clubs.[23]

20. In the only previous economic study of team movements, Quirk concludes that "(1) franchise moves have been approved without substantial opposition by other owners; (2) the justification for moves of 'lack of fan support' is in most cases of dubious validity; (3) franchise moves have not had the effect of more evenly balancing revenue potential within the league; (4) the assignment of all local TV revenues to the home team has been an important element in roughly half of the moves; (5) the moves have not been particularly successful in terms of long-run viability at the new locations [9, 60]."

21. In 1982 Congressional hearings, Donald Fehr, then General Counsel for the MLBPA, emphasized the preemptive power of the Minors. "(B)y virtue of interlocking agreements with all major league and minor league teams, it effectively controls access to the industry, because it controls all stadiums, and substantially all cities in the country [1, 37]."

22. The original CL had clubs in five founding cities: New York, Houston, Toronto, Denver, and Minneapolis-St. Paul. It was still not certain that the CL would actually penetrate these and other markets. The chief stumbling block in the formation of the league was the indemnity asked by the minor leagues in the prospective CL markets. The American Association had asked $800K for each of five clubs and the International League claimed $850K for each of two clubs.

23. The controversy was resolved with the compromise that any club expanding into an occupied market must compensate the incumbent club for $100,000 plus one-half of the cost of clearing the original market. The compromise required the amendment of MLB Rule 1-C, which called for the unanimous approval of clubs in both leagues where a

The second expansion phase was the result of the imbalanced competition that baseball purists feel is inherent in the ten-team format.[24] Following the successful example of the NFL's division format, each league agreed to add two new clubs and expand into two six-team divisions in 1969, with the league champions being determined in two postseason best of five series. The AL moved first by allowing the Kansas City Athletics to move to Oakland, and then replaced the Kansas City club with the Royals and unilaterally expanded into Seattle. The National League followed with expansion into Canada with the Montreal Expos, and added the San Diego Padres to the crowded market of Southern California. After one unsuccessful season in Seattle, the Pilots were sold in bankruptcy proceedings to a group from Milwaukee for $10.6 million in 1970.[25] King County (Seattle) then sued the American League for $32.5 million in damages from the loss of the Pilots. The suit was dropped when the AL awarded a compensatory franchise to Seattle (Mariners) in 1977. For the purpose of balanced scheduling, the AL expanded to 2 divisions of seven clubs in that year by adding the Toronto Blue Jays.[26] Both of the subsequent two-team expansions in 1993 and 1998 are the result of increased pressure by Congress to remove MLB's antitrust exemption. The expansion choices of Denver, Miami in 1993 and Phoenix in 1998 were economically reasonable in terms of nonduplication and multiregional exposure. The case of Tampa Bay in 1998, however, is revealing about the tactics of MLB in the relocation-expansion process. Tampa obviously infringes on the market of the Florida Marlins, but the region had been exploited previously as the middle vertex in the extortion triangle by six MLB clubs in their negotiations for stadium concessions or in finding local buyers.[27]

Although it is difficult to assign financial reasoning to the determination of the amount of the franchise or expansion fees,[28] it is useful to view these fees as a multiple of anticipated revenue

club wishes to move into a city already occupied by a club in the rival league. The required vote was reduced to three-fourths majority. The Dodgers agreed to the compromise if the Angels played their first season in the minor league Wrigley Field and then rented Dodger Stadium for 4 years. The indemnification of the Pacific Coast League had cost the Dodgers $500,000.

24. After this initial expansion flurry the two leagues were each playing 162 game schedules with 10 teams. The true general equilibrium for a league involves season length and number of divisions, as well as league size. The NL abandoned a 12-team league in 1900 by dropping clubs in Cleveland, Baltimore, Washington and St. Louis, which created the opportunity for the formation of the American League in 1901. In the context of club theory, if the size of the league becomes suboptimal, expansion ultimately requires an increased number of leagues or divisions.

25. Milwaukee was probably passed over in the 1969 expansion because of the factors underlying the move of the Braves in 1966 and the litigation to prevent the move. In *State of Wisconsin v. Milwaukee Braves*, 144 N.W. 2d 1 (Wisc. S.C. 1966), the Wisconsin Supreme Court held that state laws cannot regulate a national sport, and that the silence of Congress implied that MLB should be allowed to police itself. The U. S. Supreme Court refused to review the case.

26. The National League did not expand with the AL and also refused the possibility of interleague play. Expansion required a unanimous vote in the National League and only a three-fourths majority in the AL.

27. St. Petersburg (Tampa Bay) opened a $138 million stadium in 1990 without a home club. Tampa interests (Frank Morsani) had been involved with the aborted purchases of the Minnesota Twins in 1984, the Oakland A's in 1985, and the Texas Rangers in 1988, each with the intention of relocating to the Florida Suncoast Dome. In each case the Tampa contingent offer to buy was used as leverage to find a local owner. In 1988 the Chicago White Sox had negotiated a preliminary lease with the Florida Suncoast Dome in its threat to move from Chicago. In 1991 Tampa Bay lost in the expansion sweepstakes to South Florida, and in 1992 a Tampa group (Vince Naimoli) was passed over in the sale of the Seattle Mariners and the San Francisco Giants. Approval of Naimoli's bid of $115 million was passed over by the league in favor of the local bid of $100 million by Peter MacGowan with the promise to keep the team in the Bay area. Naimoli sued, and MLB responded by awarding the Naimoli syndicate with the 30th MLB franchise in 1995.

28. Initially, MLB franchise fees were disguised as the acquisition costs for the monopsony rights to the players selected in expansion drafts from existing clubs in the league. The costs per player were about five times the average salary in 1961-2. The fees then grew in rough approximation to the growth in MLB revenues. The 1969 NL expansion fees were a flat $10 million compared to the AL's $5.25 million, probably because the NL clubs and their new stadia were outdrawing the AL clubs during the period 1962-77 by 25 to 50 percent.

streams of an average club during the three most recent expansions. The MLB expansion fee was set at $6.25 million to $7 million in 1977 and the new clubs had to forego all media revenue for 3 years. This implies a 1977 present value of about $9.5 million, including the $2.5 million in foregone media revenue for 1977–9. When the expansion fee was assessed in 1975, the average revenue of a MLB club was about $6.8 million. This yields a revenue multiple of $\mu = 1.4$ for MLB in 1977. In the 1993 expansion, the fee was $95 million with foregone media revenue of about $13 million in 1993.[29] This implies a present value fee of about $108 million for the 1993 MLB expansion, and a multiple of $\mu = 2.0$ times 1991 revenues of $53 million per club. The 1998 expansion clubs are paying a fee of $130 million and each is foregoing $5 million in media shares for 5 years, for a total fee of $155 million. Based on estimated nonstrike revenues of $62 million in 1995, this implies a revenue multiple of $\mu = 2.5$ for the 1998 expansion fee.[30]

National Football League

The keys to the understanding of "expansion" in the NFL are also found in the logic of non-duplication (Proposition 2), the threat of rival leagues (Proposition 3), and the restraints of the unanimity voting rule for expansion. The major difference between the NFL and MLB expansion histories derives from their respective origins, and the absence of the preemptive power of the minor league system in the NFL. MLB began in the metropolitan East and expanded West, whereas the NFL began in small Midwestern cities and spread outward to the metropolitan coasts. NFL expansion consistently avoided multiple-team markets from the outset. Without the preemptive buffer of minor league clubs in the marginal expansion sites, the availability of these large metropolitan duopoly markets created the conditions favorable for the formation of successful challenges from rival football leagues. It was in the environment of rival league warfare that the NFL was forced to "expand."[31]

During the decade of the 1950s most NFL owners wanted to expand into Dallas and Minneapolis, among other "western" sites, but could not because of the 12/12 unanimity voting rule for expansion. After the NFL expansion into Dallas and Minnesota was stalled, the critical eight-team mass was allowed to form for the rival American Football League in 1959.[32] In a preemptive move the NFL amended its expansion voting rule to 10/12 and admitted the Dallas Cowboys and Minnesota Vikings to the NFL in 1960 and 1961. The AFL substituted the Oakland Raiders for the lost Minnesota opportunity and duplicated the Dallas market with the Texans.[33] Subsequent expansion and relocation in the NFL and AFL are listed in Table IV. Both leagues then experi-

29. For the first time in expansion history, the AL would provide players in the NL expansion draft and participate in the $95 million fee. The 12 NL clubs received $12.3 million each, while the 14 AL clubs shared only $3 million apiece.

30. Of the $95 million fee: $32 million (25 percent) is paid in 1995, $25 million (20 percent) in 1996, $40 million (30 percent) in 1997 and $33 million (25 percent) is due at the time of the expansion draft in November 1997.

31. The first successful challenge came from the All-America Football Conference in the four years after WWII, and resulted in the NFL's 1950 merger with three successful AAFC clubs: the Baltimore Colts, the Cleveland Browns and the San Francisco 49ers. The merger was approved after the Washington Redskins received a $150,000 indemnity from the Colts.

32. Walter Wolfner, owner of the Chicago Cardinals (stepfather of current owner, Bill Bidwill), wanted to keep relocation sites open, and consistently "vetoed" expansion in 10–2 votes with George Marshall, owner of the Washington Redskins.

33. The AFL then sued the NFL for antitrust violation. In American Football League v. National Football League, 323 f.2d 124 (4th Cir. 1963) the Court found that "the fact that the American League was successfully launched, could stage a full schedule of games in 1960, has competed very successfully for outstanding players, and has obtained advantageous contracts for national television coverage strongly supports the District Court's finding that National did not have the power to prevent or impede the formation of the new league" [1, 501].

Table IV. Franchise Expansion and Relocation in National Football League

Date	Relocation (R), or Expansion (X) and Suburban (S)		Expansion Fee ($mil)
1960	X	Expansion Dallas Cowboys (NFL)	.60[a]
	R	Chicago Cardinals to St. Louis (NFL)	—
1961	X	Expansion Minnesota Vikings (NFL)	.60[a]
	R	Los Angeles Chargers to San Diego (AFL)	—
1963	R	Dallas Texans to Kansas City Chiefs (AFL)	—
1966	X	Atlanta Falcons (NFL)	8.50[b]
	X	Miami Dolphins (AFL)	7.50
1967	X	New Orleans Saints (NFL)	8.50[b]
	X	Cincinnati Bengals (AFL)	8.00
1970	X	AFL-NFL merger (ten AFL clubs)	18.00[c]
1971	S	Boston (New England) Patriots to Foxboro, Massachusetts	—
	S	Dallas Cowboys to Irving, Texas	—
1973	S	Buffalo Bills to Orchard Park, New York	—
1975	S	Detroit Lions to Pontiac, Michigan	—
1976	X	Expansion Seattle Seahawks (AFC)	16.00[d]
	X	Expansion Tampa Bay Buccaneers (NFC)	16.00
	S	New York Giants to East Rutherford, New Jersey	—
1980	S	Los Angeles Rams to Anaheim, California	—
1982	R	Oakland Raiders to Los Angeles	—
1984	R	Baltimore Colts to Indianapolis	—
	S	New York Jets to East Rutherford, New Jersey	—
1988	R	St. Louis Cardinals to Phoenix, Arizona	—
1995	X	Expansion Carolina Panthers (NFC)	140.00[e]
	X	Expansion Jacksonville Jaguars (AFC)	140.00
	R	Los Angeles Raiders to Oakland, California	—
	R	Los Angeles Rams to St. Louis	—
1996	R	Cleveland Browns to Baltimore Ravens	—
	R	Houston Oilers to Nashville, Tennessee	—
1997	S	Washington Redskins to Landover, Maryland	—

a. The Cowboys and Vikings each selected 36 expansion draft players at $15K apiece.

b. The Falcons, Dolphins, Saints and Bengals each selected 42 players at $200K apiece.

c. Ten clubs merged from the AFL: Boston Patriots, Buffalo Bills, Cincinnati Bengals, Denver Broncos, Houston Oilers, Kansas City Chiefs, Oakland Raiders, Miami Dolphins, New York Jets, San Diego Chargers. Nine AFL clubs paid $2M per club indemnity to the two NFL clubs that were doubled: the New York Giants and the San Francisco 49ers. The Bengals paid the expansion fee of $8M. AFC clubs did not receive a share of 1967 expansion proceeds. The original AFL expansion fee was $25K in 1959.

d. The Seahawks and Buccaneers received full TV shares. Each paid $3M in 1974-5, $2M in 1976-80 plus 4 percent of unpaid balance.

e. The Panthers and Jaguars each receive half TV shares in 1995-9 ($48.75M). Each pay the league $42M in 1993, $28M in 1994, and $17.5M in 1995-8 plus 6 percent of unpaid balance.

enced minor dual-market adjustments. The Chicago Cardinals relocated to St. Louis in 1960 with a side payment of $500,000 made by the Chicago Bears, the Los Angeles Chargers moved to San Diego in 1961 and the original cornerstone of the AFL, the Dallas Texans, became the Kansas City Chiefs in 1963. As the two leagues battled, player costs escalated and competitive expansion was pushed into marginal sites of Atlanta (NFL) and Miami (AFL) in 1966, and New Orleans (NFL) and Cincinnati (AFL) in 1967.[34] The leagues reached a merger agreement in 1966, where all clubs

34. QF observe that the threat of AFL expansion into Chicago in 1966 may have convinced George Halas, the owner of the Chicago Bears "to bring his considerable influence to bear (*sic*) to end the war" [10, 350].

were allowed to continue in their respective home markets after the merger became effective in 1970. The merger duplicated the NFL clubs in New York and San Francisco, for which the nine existing AFL clubs paid an $18 million indemnity (total) to the Giants and 49ers.

Although the 1974 decisions to expand into Seattle and Tampa Bay in 1976 were made amid a minor war with the rival World Football League (1974–5) and player strike, these preemptive expansion decisions also reflect an abiding concern of the NFL for a multi-regional balance necessary to maximize national media rights fees. Tampa Bay and Seattle (along with their respective stadium guarantees) were selected as NFL sites before potential ownership groups were even evaluated. In an effort to exact the maximum stadium concessions, the NFL selected a set of five "finalists:" Tampa Bay, Seattle, Memphis, Phoenix and Honolulu, and then set the fee at $16 million. Not only does this process maximize stadium concessions from expansion municipalities, but it also increases concessions made by those unsuccessful expansion markets that are made potentially available for franchise relocation. In 1977 the prime relocation target became an expansion-frustrated Phoenix. By comparison, the 1993 NFL expansion selections of Carolina (Charlotte) and Jacksonville for the 1995 season were made on the strengths of the ownership groups as well as the strategic importance of the location.[35] Stadium concessions were again maximized as "finalists" were reduced to five: Carolina, Jacksonville, Memphis, Baltimore and St. Louis.[36] The fee was set at $140 million and the new clubs would forego one-half of a media share ($16.25 million) for three years. After the 1993 expansion, the frustrated finalists, Memphis, Baltimore and St. Louis, would then predictably become prime relocation targets for other NFL clubs.

In the 1977 expansion, the franchise fee was set at $16 million. NFL revenues were about $6.4 million per club in 1974, which sets the revenue multiple at $\mu = 2.5$. In the 1995 expansion the present value of the fee was $180 million, including the foregone media revenue of $40 million for 1995–7.[37] Total revenues were about $62 million for the average NFL club when the fee was assessed in 1993, which implies the multiple $\mu = 2.9$. The values of these revenue multiples are, in theory, determined by the business risk inherent the respective leagues, which is a function of the variability in the revenue stream and cost structure.[38] For example, before the MLB strike of 1994, NFL and MLB clubs had roughly the same average annual revenues. The major financial difference between the leagues stems from the greater variance and higher risk in MLB revenue streams, and hence the higher capitalized values and franchise fees for the NFL.

35. In its eagerness to attract a NFL franchise, Jacksonville had become to the NFL extortion game what Tampa Bay was to that of MLB. Jacksonville served in the bargaining strategies of the Baltimore Colts, the New Orleans Saints, the Houston Oilers, the St. Louis Cardinals and the Atlanta Falcons. As a rival club, Jacksonville was among the attendance leaders in the WFL war of 1974–75 and the United States Football League war of 1983–85.

36. At the outset St. Louis was believed to be the favorite because of its stadium, but there was concern in the turnover of ownership groups. Expansion into Baltimore would have duplicated the Redskins in Washington.

37. Of the $16 million fee for 1977, each expansion club paid $3 million in 1974–75, $2 million per year in 1976–80 plus 4 percent of the balance. Of the $140 million fee for 1995, each club paid $42 million in 1993, $28 million in 1994, $17.5 million in 1995–8 plus 6 percent.

38. The value of a particular franchise also reflects the financial risk inherent in a club's capital structure. See Vrooman [18]. The 1996 franchise valuations by Financial World used base multiples of 2.2 for MLB and 2.7 for the NFL.

III. The Extortion Triangle

Major League Baseball

In the four years preceding the MLB strike of 1994, there were four new ballparks that opened for existing franchises.[39] The construction of each of these four stadia involved the extortion of a public subsidy with the threat of franchise relocation. The recent history of MLB stadium extortion is outlined in Table V. The blueprint for stadium extortion in MLB was drawn in 1988 by the manipulation of the cities of Chicago and St. Petersburg and the states of Illinois and Florida by Jerry Reinsdorf and Eddie Einhorn, owners of the Chicago White Sox.[40] The White Sox threat of Florida relocation made an ideal stalking horse for a New Comiskey Park in Chicago, because St. Petersburg had already begun construction of the Florida Suncoast Dome in 1987 to attract the next available MLB expansion franchise. The White Sox signed a contingency agreement with St. Petersburg to move to Florida, if the Illinois legislature did not meet their stadium demands. The credible White Sox relocation threat was then used to leverage an additional $30 million in stadium financing for a $150 million New Comiskey Park with favorable lease concessions.[41] The question has been raised as to whether the White Sox ever had any intention of leaving Chicago [3; 14]. According to the dual-market theorem, however, the threat may have been real, because the relocation of the White Sox to Tampa would have been a superior move.[42]

The extortions of stadium agreements in Baltimore and later in Cleveland followed the White Sox blueprint, but were complicated by the competition of joint extortion threats by the NFL clubs in the respective markets.[43] The Orioles shared Baltimore's Memorial stadium with the Colts, and each engaged in a competitive "me-tooism" in their stadium negotiations. When the move of the Colts from Baltimore became a foregone conclusion in 1983, stadium negotiations with the Orioles were conducted separately. Although the Orioles never formally threatened to leave, the club refused to sign any lease for longer than a year. The move of the Orioles to RFK Stadium in Washington had been feared since the ownership transition of 1979, and the actual move of the Colts to Indianapolis in March 1984 lent credibility to the explicit Oriole view that a long-term commitment was not possible without a new stadium. The extortion triangle was real, and the state of Maryland ultimately approved funding from a series sports lotteries for two new stadia,

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39. The Toronto Skydome was completed in 1989 for a cost of $570 million, of which $120 million was funded by a private consortium. The original cost for the Skydome was to have been $167 million. The cost overruns are the result of separation of financial responsibility and control for construction design. As minority owners (49 percent) the consortium was not liable for overruns, but twelve of the fifteen voting members of the Skydome Board represented the consortium.

40. George Steinbrenner's threat to move the Yankees yielded the $106 million renovation of Yankee Stadium in 1974–75. In 1985, George Argyros renegotiated the Seattle Mariners' Kingdome lease with the threat of moving the club. The Mariners paid no rent in 1985–6 and the previously negotiated rent of $3.2 million was cut to $1.2 million per year. In order to keep the Pirates from moving in 1985, the city of Pittsburgh subsidized $15.5 million in ownership.

41. The White Sox had previously agreed to an annual stadium rent of $4 million, which was ultimately cut in half, the club pays rent only if attendance exceeds 1.2 million. In the first decade 1991–2001 the stadium authority will pay the club a $2 million maintenance subsidy. The stadium is financed in full by revenue bonds and a 2 percent hotel-motel tax in Chicago.

42. Reinsdorf called the extortion game "a no-lose situation." In Florida "gross annual broadcast revenues in the first year of operation would be $14.9 million, with the White Sox share being $10.3 million—several million dollars more than they finally got in their Chicago agreement [3, 148]." There is no evidence that the league would have stopped the superior move. Recall that the NFL Chicago Bears had actually subsidized the relocation of the Chicago Cardinals to St. Louis in 1960.

43. The White Sox quest for a stadium had been previously complicated by the Chicago Bears relocation threats [3].

Table V. Expansion and Extortion in Major League Baseball

Date		Expansion (X) and Extortion (T) Clubs	Expansion Fee ($M)	Stadium $Cost/ Capacity	Luxury Boxes	Terms/Incentives
1988	T	Chicago White Sox to St. Petersburg[a]		147M/44K	93	40 year lease, $2M maintenance subsidy, $5M luxbox
	T	Baltimore Orioles to Washington, D.C.[b]		206M/48K	72	30 year lease, most of luxbox, funded from sports lottery
1990	T	Cleveland Indians		180M/42K	126	Jacobs Field funded from tobacco and alcohol tax
	T	Texas Rangers from Arlington to Dallas		191M/49K	112	$135M from .5% sales tax, $3.5M rent, all luxbox after 1994
	T	Montreal Expos		—	—	$33M public ownership subsidy
1993	X	Colorado Rockies	95.0	216M/50K		Coors Field bonds funded from six-county .1% sales tax
	X	Florida Marlins	95.0	/41K	216	Joe Robbie Stadium (private) in place
1995	T	Seattle Mariners to Northern Virginia[c]		320M/47K		Mariners $45M, King County $127.5M, Washington $147.5M
	T	Pittsburgh Pirates to Northern Virginia[d]		208M/40K		$35M lease concessions, can move without new park by 2001
1996	T	San Francisco Giants[e]		255M/42K		Private Pacific Bell Park on public land in China Basin
	T	Milwaukee Brewers[f]		250M/43K		Brewers $90M ($50M loan), Wisconsin $160M
	T	Detroit Tigers[g]		240M/42K		Tigers $145M, Detroit $40M, Michigan $55M
	T	Cincinnati Reds[h]		270M/42K		Riverfront project with Bengals, funded from .5% sales tax
	T	Houston Astros		265M/42K		$180M from sales tax increment and tourist taxes
1998	X	Arizona Diamondbacks	130.0	278M/47K		BankOne Ballpark, $238M funded from .25% sales tax
	X	Tampa Bay Devil Rays	130.0	138M/43K		Thunderdome (Florida Suncoast Dome) in place

a. The White Sox had previously threatened to move to suburban Chicago (Addison) in 1986. The leverage of the Florida move increased the stadium price by $30M.

b. Beginning in 1982 the Orioles refused to sign any lease in excess of one year, and stated that a long term commitment was impossible without a new stadium.

c. The Mariners renegotiated their lease at the Kingdome in 1985 for 10 yrs, 1985–6 rent free, 1987–95 $1.2M (down from $3.2M)

d. A public ownership subsidy of $15.5M from the City of Pittsburgh was necessary to keep the club from relocating in 1985. Team may be moved if losses exceed $15M, financing for new stadium is not in place by November 1998, and the stadium is not finished in 5 years.

e. Bay area voters had refused public funding for a new park on four previous occasions. The Giants were sold in 1992 to a Tampa group for $115M, but MLB owners voted in favor of a $100M deal from local San Francisco buyers.

f. The Brewers have threatened to move and sought public subsidization of a new stadium since 1990.

g. The City of Detroit had negotiation problems with the previous Tigers owner and talks were stalled until team was sold in 1992. The "threat" was the move to the suburbs.

h. The Reds ownership withheld $3.6M in rent since 1994 to receive the same $3M lease concessions as joint Riverfront tenants the NFL Bengals.

one to gain the long term commitment of the Orioles and the other to attract a NFL franchise. With the help of the Colts departure, the Orioles had levered a proposed $15 million renovation of Memorial Stadium in 1983 into a long term commitment with the $235 million Maryland Stadium Authority in 1988.[44] In this joint NFL-MLB extortion, the relevant and recurring question becomes distinctly clear. Why did the NFL franchise leave town, and the MLB club remain?

The leverage was the same in Cleveland, but the stadium landlord-tenant relationship was different. The NFL Cleveland Browns controlled the MLB Indians lease at Cleveland Municipal Stadium. After Indians ownership changed hands in 1986, the new owners threatened to leave Cleveland, unless they received a new baseball-only facility near downtown. The City of Cleveland, the County of Cuyahoga and the State of Ohio acquiesced and construction of the Indians' new $180 million Jacobs Field became part of the $425 million Gateway Sports Complex (including Gund Arena for the NBA Cavaliers). The Browns were left in Municipal Stadium without a MLB tenant.[45] At about the same time as the Cleveland extortion, the Texas Rangers (also under new ownership) made a credible threat to make the move from the Dallas-Ft. Worth suburb of Arlington to downtown Dallas in search of a new stadium. The City of Arlington approved a sales tax increase early in 1991 to build the $190 million Ballpark in Arlington that was required to keep the Rangers.[46] Since the revenue potential obviated by these four stadia (and Toronto's Skydome in 1989), at least ten MLB clubs have engaged in one form of stadium extortion or another.[47] Each of the new stadia will be funded by public-private sharing, ranging from 85/15 public/private split for Milwaukee, Seattle, and expansion Arizona, to the 40/60 split for Detroit and the private Pacific Bell Park being built on public China Basin land in San Francisco. It is remarkable, however, that not one of the dozen or so MLB stadium extortion games has ultimately resulted in the relocation of a franchise.[48]

National Football League

The relocation shakedown following the NFL merger began with the suburbanization of new stadia into smaller cities surrounding the original home markets.[49] The most precipitous move

44. The terms of the original 15 year lease in 1988 were made more favorable in 1992, when the lease was extended 30 years and the rent payment was changed to a percentage of revenue rather than one-half of the operating profit. The Orioles operating profit was about $20 million on $80 million in revenues in 1992. Stadium rent was about $9 million. The total cost of the Camden Yards project was about $206 million, $105.4 million for the stadium and the rest for land acquisition.

45. Richard Jacobs, owner of the Indians, had also refused a joint $130 million renovation of Municipal Stadium with Art Modell, owner of the Browns, who was, in turn, not included in the Gateway project.

46. The cost of the stadium was $191 million, of which $135 million was to be covered by 30 year municipal bonds with the balance paid by the options to buy luxury seats (PSLs). Annual debt service is provided by an annual rent payment of $3.5 million by the Rangers and the .5 percent sales tax. The City of Dallas had only offered land and utilities for the stadium. Arlington had paid most of the $10 million debt of the Washington Senators in 1971 to originally attract the franchise.

47. Profits for the White Sox rose from $1.27 million in 1990 before the New Comiskey to $21.9 million in 1992. The Orioles showed a profit of $20 million in 1992 and $25.5 million in 1993 after the opening of Camden Yards.

48. Tampa Bay did receive an expansion franchise in 1998 for its part in the extortion triangle. The middle vertex in the triangle is currently occupied by William Collins III in Northern Virginia, who was frustrated in the 1998 expansion selections of Tampa and Arizona. The Northern Virginia group has been played as the pawn in the Seattle and Milwaukee games of 1995, and has actively sought the relocations of the NL Pittsburgh Pirates and Houston Astros. It is thought that MLB would more likely approve the relocation of an NL club to the regional market occupied by the AL Baltimore Orioles.

49. Most of these suburban moves, such as the Dallas Cowboys from the Cotton Bowl in Dallas to Texas Stadium in Irving in 1971, characterize polynuclear metropolitan decentralization or "white flight." Texas Stadium is also one of the first uses of the personal stadium bond or seat license to finance stadium construction. See Table IV *supra.*

was the 1978 agreement of the Los Angeles Rams to relocate to Anaheim for the 1980 season.[50] This left the Los Angeles Memorial Coliseum (LAMC) without a NFL tenant and opened a gap along the NFL expansion continuum. The gap in Los Angeles was unique in that it was potentially profitable for an individual club or rival league, but to the NFL, it was inferior duopoly slot occupied by the Rams. The LAMC actively sought either an expansion or relocation NFL franchise. The NFL provided little hope of expansion into the occupied Los Angeles market, and the scarcity of relocation candidates among existing NFL clubs created the conditions for a triangle of reverse relocation and stadium extortion (π-V-π', in Figure 5). The extortion potential of the Coliseum vacancy was exploited by the Colts, the Miami Dolphins and the Minnesota Vikings, in addition to the double extortion of two Coliseums over 15 year span by the Oakland Raiders.[51] The history of subsequent NFL relocation threats is detailed in Table VI.

The expiration of Raiders lease with Oakland-Alameda County Coliseum in 1979, coincided with the Rams move to Anaheim. While the Raiders negotiated with the two coliseum commissions simultaneously, the Raiders renovation demands increased steadily. In March 1980, the Raiders and the LAMC signed an agreement outlining the conditions of the Raiders move to Los Angeles.[52] Within 10 days the other NFL owners voted 22-0 (5 abstentions) against the move under Rule 4.3 of the *NFL Constitution and Bylaws* [6].[53] The LAMC was joined by the Raiders in a suit against the NFL for antitrust violation. The case was split into a liability phase, *Raiders I,* and damage phase, *Raiders II.* In *Raiders I,* the Court found that the NFL had committed an antitrust violation and was enjoined from preventing the move of the Raiders to Los Angeles. In *Raiders II,* the Raiders were initially awarded $34.6 million and the LAMC, $14.6 million in trebled damages, but the Raiders portion was ultimately offset by the amount of damage that the Raiders had caused the league by usurping the right of the NFL to expand into the Los Angeles market.[54] Based on the offset theory the Court reasoned that the League should be compensated for the increased value in the Raider franchise as the result of the move from Oakland to Los Angeles.[55] The NFL has subsequently (after 1987) used the offset theory to justify the relocation fee imposed on relocating franchises. Soon after *Raiders I,* the member clubs would begin to challenge the presumed antitrust vulnerability of the NFL in the relocation matters of its self-governance.

Immediately after *Raiders I* was resolved, the Colts were the first to bolt from Baltimore to Indianapolis in 1984. One of the major complaints about the Colts move was the indifference of the Colts in stadium negotiations with the City of Baltimore [3]. The San Francisco 49ers and the

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50. The capacity of Anaheim Stadium was expanded from 43K to 70K for an estimated cost of $22 million, financed by revenue bonds to be paid off from 7.5 percent of the gate. The major part of the deal involved Rams owner, Caroll Rosenbloom, in a 3-way partnership $125 million commercial development of 95 acres surrounding the stadium.

51. The most successful use of the triangle was by the Vikings, who used the threat to help secure funding for the Hubert H. Humphrey Metrodome in 1980. The Dolphins extortion of the new Orange Bowl failed, and owner Joe Robbie built privately financed stadium in suburban Miami in 1985-87.

52. The deal included a $6.7 million loan, tax breaks, title to 99 luxury boxes and most of the gate and stadium revenues.

53. Rule 4.3 currently states: "No member club shall have the right to transfer its franchise or playing site to a different city, either within or outside its home territory, without prior approval by the affirmative vote of three-fourths of the existing member clubs of the league" [5, 8]. "Home territory" to the NFL lies within 75 miles from the exterior city limits. In response to the threat of the LAMC suit in 1978 the NFL had amended Rule 4.3, which previously had required the unanimous approval of any move into the home territory of any member club.

54. The LAMC was paid $19.6 million plus $9.9 million in legal fees late in 1987, and the Raiders damages were finally settled out of court in March 1989. The Raiders received $18 million, from which they paid their legal fees of $8 million.

55. Al Davis, managing general partner, stated in court that the move had increased the Raiders value by $25 million.

Table VI. Expansion, Relocation and Extortion in the National Football League

Date		Relocation (R), Suburban (S), Expansion (X) and Extortion (T)	Expansion Fee ($M)	Stadium $Cost/ Capacity	Luxury Boxes	Lease Terms/Incentives
1980	R	Los Angeles Rams to Anaheim		22M/70K	100	30 yr for 7.5% of gate ($560K)/yr; 95 acres ($25M)
	T	Minnesota Vikings to L. A. Coliseum		62M/64K	100	Hubert Humphrey Metrodome
1982	R	Oakland Raiders to L. A. Coliseum	11.6	15M/92K	99	10 yr for 8% of gate; $6.7M loan for sky boxes
1984	R	Baltimore Colts to Indianapolis[a]	0.0	80M/61K	87	20 yr for $250K/yr + (2) 5 yr options; $12.5M loan
	S	New York Jets to East Rutherford, New Jersey	—	/77K	66	Giants Stadium in place
1985	T	San Francisco 49ers to San Jose	—	30M/		Candlestick Park renovation
	T	Philadelphia Eagles to Phoenix [†]	—	10M/	89	10 yr deferred rent ($800K/yr); 100% luxbox for $8M/yr
	T	New Orleans Saints to Jacksonville [†]	—			40 yr for 5% of gate; 100% box revenue
1987	T	Atlanta Falcons to Jacksonville	—	214M/71K	183	Georgia Dome
1988	R	St. Louis Cardinals to Phoenix [b]	7.5	12M/71K	60	10 yr and (4) 5 yr options for 10% of gate
1995	X	Expansion Carolina Panthers	140.0	150M/73K	137	Ericsson Stadium
	X	Expansion Jacksonville Jaguars	140.0	121M/73K	87	Gator Bowl renovation, 30 yr lease, $250K rent first 5 years
	R	Los Angeles Raiders to Oakland[c]	0.0	130M/63K	175	16 yrs for $500K/yr; 100% club/luxbox
	R	Los Angeles Rams to St. Louis[d]	29.0 ‡	280M/66K	130	30 yrs for $250K/yr; 100% club/luxbox
	T	Cincinnati Bengals to Baltimore/Cleveland	—	270M/		New Riverfront stadium complex, Bengals $25M–$35M
	T	Chicago Bears to Gary Indiana	—	395M/		Soldier Field renovation or new stadium at McCormick Place
1996	R	Cleveland Browns to Baltimore Ravens	29.0 ‡	200M/68K	108	30 yr rent free; operating exp; 100% club/luxbox
	R	Houston Oilers to Nashville[e]	—	292M/65K	120	30 yr; $3M operating exp; 100% club/luxbox
	T	Seattle Seahawks to Los Angeles [†]	—	200M/		Kingdome renovation or new stadium
	T	Tampa Bay Buccaneers	—	168M/65K		.5% community development sales tax
1997	S	Washington Redskins to Landover, Maryland		246M/79K	280	Redskins $175M, Maryland $71M infrastructure
1999	X	Expansion Cleveland Browns	200.0	223M/72K	108	Cleveland $175M, $28M–$48M loan from NFL

a. The Colts previously threatened moves to L.A. Coliseum, Memphis and Jacksonville in 1979; and Phoenix in 1984.

Table VI. Continued

b. The Cardinals created an auction environment among Phoenix, Baltimore, New York City and Jacksonville.

c. Before moving back to Oakland in 1995, the Raiders threatened moves to Irwindale in 1987, and Sacramento and Oakland in 1990.

d. The Rams created a three-city auction among unsuccessful 1995 expansion finalists: Memphis, St. Louis and Baltimore.

e. The Oilers previously threatened to move to Jacksonville in 1987 for 10K more seats and 65 "Columbia Suite" luxury boxes in Astrodome.

† Relocation threats resulted in sale of franchise. NFL blocked move of Eagles to Phoenix in 1984 before Leonard Tose was forced to sell the club and the renegotiated lease concessions to Norman Braman for $65M in 1985. In 1984 John Mecom threatened to move the Saints to Jacksonville before selling the club and the renegotiated Superdome lease to Tom Benson for $70.2M in 1985. After Ken Behring threatened to move the Seahawks to the vacant L.A. market, he was forced to sell the club for $205M to Paul Allen contingent upon Kingdome renovation.

‡ Relocation fees paid by the respective cities from Personal Seat Licences (PSLs). The Rams received $74M in PSL revenue $17M went to the league plus the $29M fee and $27M to Anaheim. The Browns received $80M in PSL revenue: paid $12M to Cleveland and $24M rebate to Maryland Stadium Authority.

New Orleans Saints threatened moves in 1984 to leverage their respective stadium renovations and lease negotiations, but perhaps the most revealing case concerned the aborted relocation of the Philadelphia Eagles to Phoenix in 1984. Leonard Tose, owner of the Eagles, had collateralized the club in the accumulation of over $30 million in debt in 1984, and was facing threats of foreclosure on the NFL club. In an effort to retain control of the Eagles and cash-out his equity, Tose agreed to sell a minority interest and move the club to Phoenix. Then, in an uncharacteristic manner, the NFL filed suit in Federal Court to prevent the move. The Eagles (Tose) then used the threatened move to leverage lease concessions from the City of Philadelphia. The club and the sweetheart lease were soon sold to Norman Braman for $65 million, and the Eagles remained in Philadelphia. The Eagles relocation case is of particular interest, because this is the only time that the League has initiated legal action to prevent a franchise relocation.

Immediately following the aborted Eagles move, the St. Louis Cardinals expressed an interest in moving to Phoenix, but were persuaded otherwise by the League. The League was concerned that placing a NFL club in a market occupied by the rival USFL would adversely affect the outcome of the pending $1.3 billion suit filed by the USFL.[56] After the *USFL v. NFL* case was resolved, the NFL allowed the Cardinals move from St. Louis to Phoenix in 1988, ostensibly because the Cardinals had followed the relocation guidelines enforced by the League as the result of *Raiders I*.[57] Based on the successful offset theory of *Raiders II*, the NFL justified a $7.5 million relocation fee from the increased value of the Cardinals as the result of the move to Arizona.[58]

The expected value of an extortion threat is augmented greatly by the "auction" environment of the NFL expansion process. The next relocation flurry, therefore, occurred in the wake of the NFL expansion decisions of 1993. Oakland, Sacramento, Memphis, Baltimore and St. Louis groups were all overlooked by the League in favor of Carolina and Jacksonville, and soon became predictable targets of extortion and relocation games. The most vulnerable of these would be the three cities previously abandoned by the NFL. The Rams exercised an escape option in their lease

56. In *United States Football League v. National Football League*, 644 F. Supp. 1040 (S.D.N.Y, 1986) the jury found that the NFL, as a monopoly had violated Section 2 of the Sherman Act, but that the USFL had damaged itself and was entitled to damages of only $1. The NFL successfully argued that the base strategy of the USFL was to force a NFL merger.

57. In 1984 the NFL stipulated the following criteria for an acceptable move: 1) The adequacy of the existing stadium and the willingness of the stadium authority to remedy any deficiencies, 2) The extent to which fan support for the team has been demonstrated, 3) The extent to which the team has received public financial support or special tax treatment, and 4) Whether the team has incurred operating losses sufficient to threaten its continued viability.

58. The expansion value of Phoenix to NFL was subject to question, because it was passed over in 1977.

and conducted an auction for the relocation rights to the Rams among the three frustrated 1993 expansion finalists: Memphis, Baltimore and St. Louis. The Rams chose St. Louis and the "mother of all stadium deals," but the League initially balked at the move because the Rams did not "meet the relocation criteria of the NFL." The Rams were ultimately allowed to move with the following indemnities to the League: a $29 million relocation fee, a $17 million share (33 percent) of the permanent seat license (PSL) fees, the Rams must pass on their share of future expansion fees if the League does not expand into Southern California, and the Rams are liable for one-half of the losses (up to $12.5 million) incurred by Fox-TV from the vacated Los Angeles market. The Rams were to receive $74 million in PSL proceeds, all of which could be used to settle these "relocation costs," and about half of which ($37 million) would be ultimately paid to the League. There are two problems with these relocation indemnities. First, the League should not be entitled to a relocation fee if the value of the relocation site (St. Louis with a new stadium) is less than the expansion value of the vacated site (Los Angeles with a new stadium). Second, the expropriation of "expansion value" from frustrated relocation sites, such as Baltimore and St. Louis in 1996 and Phoenix in 1988, should be seriously questioned, because the League had previously denied them a franchise. The League should not be compensated for lost extortion value.

After their move to Los Angeles, the Raiders did not receive strict performance of their agreement with LAMC, and the club floated extortion triangles into all parts of California: including Sacramento, Irwindale, and Oakland [16]. After Oakland was denied an expansion franchise in 1993, it made the stadium and lease concessions necessary to meet the protracted demands of the Raiders. On the day the Raiders announced their move from Los Angeles, the Rams actually did move, and the nation's second largest TV market was left without a NFL team. The Los Angeles monopoly market is a valuable expansion opportunity for the League, and the League accordingly allowed the Raiders move back to Oakland without a relocation fee.

The relocation derby achieved a sense of closure when the Cleveland Browns announced their intention to move to Baltimore during the 1995 season. The Browns did not meet the NFL criteria for relocation, but Art Modell, the Browns' owner, did fit the profile of the overleveraged relocation candidate [18].[59] Following its evolving precedent, the League allowed the move and assessed the Browns a $29 million relocation fee, and a $12 million payment to the City of Cleveland. Cleveland was promised an expansion franchise by 1999, they could keep the colors and team name "Browns," but they are obligated to spend $175 million on a new stadium for the 1999 season. Under the compromise, the League would loan Cleveland from $28 to $48 million to assist in stadium construction. The relocation costs of the transient club (renamed the Ravens) would be paid from Baltimore's PSL proceeds. Since the Ravens move, the Houston Oilers reached an agreement to move to Nashville for the 1996 season, with similar lease concessions as those received by the Ravens.[60] Finally, the unilateral attempt of the Seattle Seahawks to move to Los Angeles and usurp the unoccupied monopoly market in 1996 was blocked by the threat of fines from the League and litigation from King County.[61] The only franchise relocations that

59. Modell had topped the NFL franchise debt limit of $50 million. The Browns would receive $80 million in PSL money to be used for relocation costs, a 30 year rent free lease, all revenue from concessions, luxury boxes (108), club seating, advertising and parking. The Maryland Legislature approved the deal after Modell agreed to a $24 million kickback.

60. The mid-South market has experienced the longest frustration with NFL expansion. See *The Mid-South Grizzlies v. The National Football League*, 720 F.2d 722 (3rd Cir., 1983).

61. The League threatened a $500,000 fine to keep the Seahawks in Seattle and maintain its regional television presence in the Pacific Northwest. An option to buy the club for about $170 million in cash and the assumption of $35 million debt, was sold to Paul Allen. The deal is contingent on a $200 million renovation of the Kingdome or new stadium.

have been impeded by the NFL are the attempts of the Raiders and Seahawks to relocate to Los Angeles, and the threats of the Eagles and Cardinals to move to Phoenix. The League argues that it is powerless to stop team moves, because of the adverse ruling in *Raiders I*, and that it should have an antitrust exemption similar to MLB. There is evidence, however, that the "landmark" *Raiders* decision actually holds limited precedence for subsequent moves, and that the League's reluctance to challenge franchise relocation is unrelated to relocation law.

IV. Beyond the Law

In the opinion of most legal scholars [11; 12; 14; 15; 19; 20], the decision in *Raiders I* was flawed with internal inconsistencies. The first of two important and controversial issues raised in *Raiders I* concerned the question of whether the League was a single economic entity, or whether it had a requisite "duality" that would allow each club to act as a distinct economic unit. If the League was a single entity, then its members could not conspire in violation of *Section 1* of the Sherman Act. The Court held in *Raiders I*, however, that the League was not a single entity, and that agreements among members could be treated as conspiracy. In spite of contradicting decisions before and after *Raiders I*,[62] the NFL is, for some reason, bound by the questionable logic of the Court that the League has the requisite duality to conspire, because "clubs retained ultimate control of management decisions and ultimate responsibility for profits and losses [19, 1020]." Given the extensive revenue sharing arrangements within the NFL at the time, and the subsequent imposition of the payroll cap in 1994 as a unique form of cost sharing, it would be relatively easy now to argue that the League has essentially become the firm, and, therefore, that its members could not conspire in violation of *Section 1*.[63] The second flaw concerned the question as to what constituted the "relevant market" for the NFL. In *Raiders I* the League's "relevant market" was restricted to metropolitan Los Angeles. It should be obvious that the "relevant market" for the League superseded Los Angeles or, for that matter, California (see *Seals*). The welfare effects of the Raiders move on all markets, including Oakland, should have been considered in *Raiders I*. Finally, as was later confirmed in *Raiders II* and *Clippers*, the NFL's Rule 4.3 was ruled in violation of antitrust law, *only as it related to unique conditions surrounding the Raiders move to Los Angeles*. Rule 4.3 was ruled invalid, only because it prevented the Raiders from entering a market that was occupied by the Rams. In *Raiders I*, members of the League were simply seen as conspiring to protect the monopoly market of the Rams (Proposition 2). It is unlikely that the questionable logic of the decision in *Raiders I* could stand the light of current facts, and even if it could, its precedential relevance would be limited to league-blocked relocations into occupied markets.

If the threat of antitrust litigation against the League is essentially empty, then what explains the relative frequency of the relocation moves in the NFL? As revenue sharing within a league

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62. In *San Francisco Seals, Ltd. v. National Hockey League*, 379 F. Supp. 966 (C.D. Cal. 1974), the relevant market of the National Hockey League was determined to be the US and Canada. The league was considered a single entity, because the teams may compete on the ice but not economically. In *National Basketball Association v. SDC Basketball Club, Inc.*, 815 F. 2d 562 (9th Cir.) *cert. dismissed*, 108 S. Ct. 362 (1987) [*Clippers*] the league allowed the club to move and then sued. The Court ruled that *Raiders I* did not apply: "Franchise restrictions are not invalid as a matter of law . . . only the particular application of the franchise movement rules in *Raiders I* violated antitrust law" [12, 901]. *Clippers* was settled out of court with a $5.6 million payment from the Clippers to the NBA.

63. If a league shares revenue and costs, it essentially shares profits, and the league becomes a single economic entity of indistinguishable members. "The imposition of a payroll cap effectively eliminates increasing marginal costs of talent from the profit maximization calculus, and it thereby allows the teams of the league to collusively behave as the firm" [18, 980].

increases, more of the gains from the extortion-expansion game accrue to the league, and in the syndicated NFL, the league has virtually become the firm. As the portion of a club's revenue that is shared with the league approaches unity, the number of markets that promise superior or horizontal moves increases, and both the league and the club become indifferent as to whether the particular club stays or goes. By comparison, franchise relocation is uncommon in MLB under its relatively modest revenue-sharing formulae, because the value of a MLB franchise is still determined to a large extent by the revenue potential inherent in its home market. As the portion of a club's revenue that is retained by the club increases, so do the gains from successful stadium negotiation with the home market, relative to gains from relocation. Because of the extensive revenue sharing within the NFL, it doesn't really matter where its teams play. It doesn't matter to the individual NFL clubs because they share most of their revenues, and it matters to the League only to the extent that a club's relocation threatens a multi-regional presence necessary to maximize national media rights fees. The source of the relative locational instability of the NFL lies in the League's gross economic indifference about where its teams reside. In marked contrast, the MLB is relatively stable, because MLB clubs are more likely to stay and negotiate, rather than to leave. This immobility is not necessarily due to an allegiance to home-market fans, but more to the variance in the revenue potential inherent among home markets and the unavailability of superior MLB moves.

V. Conclusion

A monopoly league will seek to maximize its share of an expansion surplus, and consequently, league-expansion equilibrium will be inferior to the optimal league size. The duplication of a franchise in any market is inferior to conventional expansion, and if such a duopoly exists, league welfare will be enhanced if a duplicated franchise is allowed to relocate to an unoccupied expansion site. The relatively frequent franchise dislocations in the NFL are a result of an availability of superior or horizontal relocation moves due to the extensive revenue sharing within the NFL. Both the league and the club become increasingly indifferent among extortion outcomes, as the degree of revenue sharing increases. Given the abundance of expansion opportunities in both the NFL and MLB, games of stadium extortion with the threat of relocation are pervasive in both leagues. Ultimately, however, the different outcomes of extortion and relocation games are the result of the different institutional configurations of the leagues, rather than MLB's antitrust exemption. The NFL currently has the power to restrict franchise relocation without threat of antitrust litigation, and the League will regulate relocation only when it is in its best economic interest. By comparison, the outcomes of MLB extortion games have been stable, because the value of the MLB franchise is still related to its home market. Furthermore, as MLB clubs begin to share more revenue under the *Collective Bargaining Agreement of 1996,* it follows from this analysis that the extortion threats of MLB franchise relocation will become increasingly credible.[64]

After *Raiders II,* the NFL has allowed relocation of its franchises, if the club pays a relocation fee equal to the loss in the expansion opportunity to the League. This is not a relocation deterrent,

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64. In the *Collective Bargaining Agreement of 1996* MLB clubs with the highest revenues after stadium costs contribute to a pool that is divided among the clubs with the lowest revenues. The revenue-sharing plan will be phased in at 60 percent in 1996 and 1997, 80 percent in 1998, eighty-five percent in 1999 and fully implemented by 2000. At the extremes of the plan's revenue spectrum, the high-revenue New York Yankees would contribute about $5.8 million in 1996 and $14.4 million by 2000, and the low-revenue Montreal Expos would receive $5.5 million in 1996 and $13.5 million by 2000.

and it creates a welfare complication, because the fees are paid by the target cities as relocation (expansion) costs. The consensus of objective evidence suggests that positive externalities from sports venues are negligible [8]. Optimality requires that stadium concessions that are used to entice relocation (expansion) be paid by those parties who ultimately benefit from the stadium: the club and the fans. The optimality of the relocation of the Cleveland Browns to Baltimore, for example, can be questioned not only as a dual-market move, but also because of the regressivity of the sports lottery through which the State of Maryland is paying the debts of the Cleveland Browns. The recent trend toward the privatization of ownership of NFL venues through PSLs is superior to public subsidization, and it would shift relocation costs from the city to the club and fans, and thereby limit the extortion threats of opportunistic relocation.

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