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**The Other Side of League Organization – Efficiency-Aspects of Basic  
Organizational Structures in American Pro Team Sports**

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# The Other Side of League Organization

## Efficiency-Aspects of Basic Organizational Structures in American Pro Team Sports

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**Abstract:** This paper analyzes the institutional setup of major league sports. In particular, it looks at reasons for the organization of leagues as cooperatives of team-owners, the specific employment relation of a commissioner as enforcement mechanism for rules of the league, and the centralized marketing of television rights as an important and controversial example thereof. Conventional wisdom portrays the existing league organization as a cartel that exploits market power, the commissioner as an institution to enforce cartel stability, and the centralized marketing of television rights as a profit maximizing device. In contrast, this paper shows that the existing institutional structure can be explained by efficiency arguments: It reduces shirking in teams, protects specific investments, and provides insurance against quality uncertainty.

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## 1. Introduction and Overview

Economic analyses of pro team sports have been mostly concerned with issues of monopoly power.<sup>1</sup> The picture of the league organization that follows from this perspective is that of a cartel of team-owners seeking to ensure monopoly profits. The institution of the league commissioner serves as an instrument to secure cartel stability in this context. From the various collusive arrangements that aim at extracting monopoly rents from players, consumers, broadcasting companies, municipalities, etc. the centralized marketing of television rights is most prominent. It has been routinely criticized by influential economists as a profit maximizing device that needs to be abolished in order to enhance efficiency.

However, conventional economic analyses tell a very one-sided story about the organizational structures of pro team sports. The aim of this paper is to inquire into the other side of the story. It is shown that, contrary to conventional economic wisdom, there are efficiency arguments explaining the basic organizational structures of pro team sports. The cooperative agreements between team-owners, the specific employment relation of the commissioner and the centralized marketing of television rights are justified by reasons other than the extraction of monopoly rents. The arguments presented in the paper focus on the prevention of shirking in teams (section 2), the protection of specific investments (section 3), and the provision of insurance against quality uncertainty (section 4).

After having shown that there are other normative rationales besides monopoly profits for understanding main elements of the league organization, the historical process of developing the major leagues is examined. Section 5 analyzes in which way the "new" normative prescriptions may help to understand basic steps in "what has been really going on out there".

## 2. Team Production, Monitoring, and the Executive Power of the Commissioner

In their seminal paper, Alchian and Demsetz (1972) analyze a specific team production technology that generates a surplus value compared to the situation of isolated production by each owner of the input factors. This team production technology is used if the synergy effect is large enough to cover "the costs of organizing and disciplining the team members" (Alchian and Demsetz:779). These costs occur because it is difficult to assess individual team members' contributions to team output.

"With team production it is difficult, solely by observing total output, to either define or determine *each* individual's contribution to this output of the co-operating inputs. The output is yielded by a team, by definition, and it is not a *sum* of separable outputs of each of its members" (Alchian and Demsetz:779).

The measurement problem inherent in team production favors the emergence of sub-optimal behavior: If shirking in specific areas of team production is difficult to detect, individual team members privatize the benefits of reducing their effort in those areas. At the same time, the reduction of total team output is socialized. This leads to a situation in which team members end up with a sub-optimal mix of fringe benefits due to shirking and pecuniary rewards attached to the level of total output. Although team members prefer to be part of a more productive team, the achievement of a superior reward-mix depends on the cost of detecting shirking (Alchian and Demsetz:780-781). Obviously, a governance structure that minimizes the cost of monitoring individual effort in the relevant areas also safeguards the surplus or synergy effect of team production.

Before discussing the structure of such safeguards in detail we demonstrate the relevance of the theory of team production for major league sports.

## 2.1 Barnstorming, championship races and the transformation of single games into a meta-game

At the beginning of professional team sports, a rather simple production technology was employed: Barnstormers traveled from town to town and played exhibition games against local amateur teams and other barnstormers (Noll, 1991:19). Agreements on the specific rules and other conditions, for example, revenue sharing, were made and renewed on a bilateral basis for every single encounter. The product that barnstormers marketed was the single game. There was no meaningful relationship between a sequence of games and no clear ranking of teams since the programs played by different barnstormers differed greatly.

The change from this simple technology of rather isolated production of single games to the complex technology of team production coincided with the introduction of a specific meta-game. By normalizing the rules in the playing field and standardizing the playing programs, single games became strongly related to each other, this relationship could encompass a literally infinite sequence of games. The championship race and the sequence of championship races emerged as new and very valuable products. Each and every single game gained value through its inclusion in the meaningful meta-game, whose function was to reveal which of the teams was the strongest, which again is part of finding out the dominant clubs over the history of championship races in a certain league.

It makes no sense to speak of an NBA-game, say between the Chicago Bulls and the Los Angeles Lakers, as the separable output of two teams. On the contrary, the value added to this game through its being a meaningful element of the championship race and the sequence of championships races in the NBA is a central aspect of the marketable product. Obviously, all teams play in the crucial meta-game and not only the two teams engaged in the fore-mentioned encounter. Successfully separating the production process into games played by two teams would bring back barnstorming.

## 2.2 The problem of shirking on integrity

The team surplus that may be jointly generated in the above-described meta-game acts as a goodwill-factor adding value to every single game. In what sense may teams shirk on their contributions to the meta-game thus harming the goodwill-factor?

In team production, marginal products of co-operative team members are difficult to measure (Alchian and Demsetz:780). There is simply no separable output-category at this level of the production process that can be observed. All that is available are clues that may be derived from observing the input-behavior of the team members.

Playing strength is the most obvious input a team-owner is supplying to the championship race. Team-owners cannot shirk on this input because it lies in the very nature of a championship to rank the relative playing strength of the participating teams and designate the strongest performer as champion. If there is a need to introduce a governance structure securing the synergies of team production in the championship, it is certainly not motivated by reductions in the costs of measuring playing strength.

What other inputs exist in addition to playing strength? A less obvious input is integrity. It describes the extent to which the established rules are respected. It can be shown that this input is crucial to the economic value of the specific meta-game, at the same time difficult to measure.

The importance of obedience to the rules has two rationales. First, it is directly linked to the concept of the meta-game that all major leagues are built upon. By definition a championship race is a procedure that ranks the playing strength of teams in a normalized environment. It is part of the concept of this specific meta-game that no team should profit from unfair advantages by breaking the rules that define standardized and equal conditions for every performer. If another concept for giving meaning to a sequence of games had been invented, as is for example the case in the

catching industry, the prerequisite "equal rules for everybody" would not be constitutive in the same sense. Indeed, with the existing concept of relating games to each other through the mechanism of a true and fair contest, the generated goodwill strongly rests on "obedience to the rules". One manipulated game may suffice to imperil the outcome of the entire championship race. As a consequence of the close relationship between all games in team production even the rule-followers may be harmed in this case.

So far, rule following has been portrayed as prerequisite of a true and fair contest. Yet, there seems to be an additional reason for its importance. The construct of competition within an accepted and respected institutional framework is a key element of the value basis of Western constitutional societies. To the extent that sports are perceived as a fair contest in this sense, there is a strong link to this dominant value basis. The often-mentioned educational function of sports partly rests on it. Therefore, manipulating rules can also affect the economic value of the chosen meta-game by reducing its perceived compatibility with dominant values. Breaking the rules harms the positive image of sports. Image is a highly valuable asset, playing for example a key role in the transmission of advertising messages.

Considering these aspects, it can be conjectured that the input "integrity", that is the extent to which individual teams respect the established rules, is of prominent importance for the economic value of the specific meta-game produced by major leagues. At the same time "integrity" is not easy to measure. Rule violations are not committed openly and are usually hard to prove.

Because of this measuring problem, individual teams may have incentives to reduce their effort in providing integrity. Violating doping rules, exceeding salary caps and roster restrictions and so forth translate into increased playing-strength and thereby tend to lead to a concomitant increase in the team's portion of the league revenues through a higher rank in the championship. Clubs will decide to engage in this alternative method of increasing playing strength if it is cost-effective, that is if the

present value of the expected benefits exceeds the present value of expected costs. Obviously, the probability of being detected and the magnitude of punishment in case of detection affect the expected costs and play an important role in this decision. There is an opportunity cost to integrity, namely the more expensive production of the attained level of playing strength by using the permitted alternatives, as e.g., intensified training and improved tactics, to the extent that they are no longer cost-effective. Or, to put it differently, "cheaper" playing strength is the fringe benefit gained by shirking on integrity. Under these conditions, a situation may occur in which less integrity and more playing strength is supplied by the individual teams than would be the case if integrity were easier to measure. Shirking on integrity and reverse-shirking<sup>2</sup> on playing strength come in tandem.

Every team would be better off if shirking on integrity was not the expected outcome. The earlier-described contest and image effects would then add value to the championship race. For every single team playing strength would become more costly to produce without manipulation of the rules, while simultaneously each team's market value would increase, in that spectators and other customers prefer fair contests transmitting a positive image. If a "device" could be installed which lowered the cost of detecting rule-breaking, a more preferable mix of fringe benefits ("cheaper" playing strength) and benefits (more valuable playing strength) could be achieved.

### 2.3 The specialized monitor as a solution

The primary "device" described by Alchian and Demsetz (1972) for handling such shirking situations is appropriate monitoring. A specialized actor checks the input performance of team members in those areas of the production process where individual productivity cannot be observed. Gains from specialization are at the core of the mechanism: team members do not have to engage in complex multilateral control activities and the monitor gains specialized knowledge through concentrating

on his narrow task. In addition, a self selection-mechanism starts to appear: the more successfully shirking is detected, the less team members with a propensity for "effort" fear being opportunistically exploited by the team. They are systematically attracted to the team, thereby improving its overall performance. Obviously, the monitor needs to be independent and have the power to sanction effectively. Moreover, he must have incentives not to shirk his duty as monitor.

There are several alternatives for allocating rights to the monitor. The first structure to consider is that of the classical firm. Here the monitor is made the residual claimant, entitled to the net earnings of the team after paying for the other inputs. Monitoring includes observing input behavior, apportioning rewards, giving assignments and instructions, and terminating contracts and so forth (Alchian and Demsetz:782). Specialization in these activities and residual claims are connected. The incentive problem is solved by a concentration of property rights: The monitor is transformed into a real owner making profits from applying specialized knowledge to the reduction of shirking. At the same time, the other team members are transformed into employees who follow the assignments and instructions of the owner and receive contractually prearranged wages. Their property rights are diluted. Obviously, the owner-monitor of the classical firm fulfills the above-mentioned prerequisites. He is independent of individual team members, holds the power to sanction and has incentives not to shirk his monitoring duties.

If we apply this solution to major league sports, a league-firm emerges in which the single teams are to be considered as regional outlets or subsidiaries. In the special case of sports, however, this structure gives rise to a new problem of securing integrity. The difficulty stems not from "weak monitoring", in the sense that individual teams opportunistically break the rules, but from "too strong monitoring". The institution of ownership guarantees the residual right of control, which means that the league owner might intervene in the policy of every subsidiary.

Obviously, the classical firm allocates rights to the monitor that go beyond making sure teams do not shirk on the established rules. These additional rights of ownership are not only superfluous, but are also strongly dysfunctional considering the meta-game played by major leagues. A league-owner would be capable of and, at the same time, suspected of influencing or "making" rules, that is directing the behavior of the subsidiaries according to his own strategy. The ability of the owner to strategically influence rules whenever he may wish to do so does not square very well with the basic requirement that rules should be equal for every team in all relevant circumstances. Therefore, the classical firm as monitoring structure is handicapped by an additional cost of securing and credibly signaling that the owner keeps out of the policy of the subsidiaries. Presumably, this is rather difficult to achieve since it needs to be done "against" the institution of ownership, which by its very nature includes the right to intervene.

Using a political metaphor, it can be said that legislative and executive rights are tied together in the classical firm. In order to escape the dilemma of a situation in which individual teams shirk on integrity by breaking rules and the situation in which an owner-monitor has the power to plan outcomes, a clear "separation of powers" should be institutionalized. Therefore, a structure that restricts the task of the monitor to the pure implementation of the rules is needed. Moreover, rules should be openly decided upon such that they are not at the mercy of the whims of a few influential actors. Effective "constitutional safeguards" are required in major league sports if the contest and image effect of a true and fair championship is to be preserved.

This is exactly what we find in practice. In major league sports, the commissioner or league president is to be seen as the monitor. Markham and Teplitz (1981:36) state, "...the office of the commissioner's main function is to maintain the integrity of the sport". The reason for this narrow specialization should be apparent by now. The commissioner safeguards the contest and image effects of the championship race by checking the "supply" of integrity by the individual league members.

The legislative power is clearly separated in all major leagues. A form of cooperative association of team-owners always makes the rules. Equal representation of all owners in the "legislative assembly" of the league guarantees transparency and prevents one actor or a group of influential owners from dominating. The specific covenant that constitutes the cooperative association in every league, e.g., in baseball, the Major League Agreement, plays the fore-mentioned role of a "constitutional safeguard".

But, integrity-management provides just one of the reasons for choosing a cooperative association of team-owners to organize the "legislative power" in the league.

### 3. Specific Investments, Vertical Integration and the Legislative Power of the Owner-association

The concept of the specific meta-game has an additional implication. In order to determine the strongest performer in a certain market, all relevant teams need to be ranked in the same contest. The validity of the meta-game, which adds value to each single game, partly rests on its monopoly status. Consequently, major leagues tend to be monopolies, leaving no room for competing leagues. Otherwise, the league organization would sacrifice much of the benefits generated by the complex technology of team production. Having several major leagues in a single market area, each of them producing a winner, does not lead to a consistent ranking of all relevant performers. The more winners of this kind there are, the less valuable the meta-game becomes. A brief look at the history of major league sports shows that the periods of inter-league competition have been rather short and ended in mergers when the contender succeeded in seriously challenging the established league at all.<sup>3</sup>

#### 3.1 Specific investments and the hold up-risk

If we look at the value chain of major league sports, two main levels can be identified: the level of production or development of the single teams and the level of production of the championship race. The teams can be seen as inputs into the second level, inputs that are supplied by distinct economic units controlled by individual team-owners. If, for the reasons discussed above, major leagues tend to be monopolies, the investments of individual team owners in the production of a team are specific by definition. Incapable of producing either the single game or the crucial meta-game in isolation, an individual team-owner has no economically viable exit-option from a monopolistic major league. Since the specific investments of the single team-owner represent hostages for an economic actor in control of the second level of production, a systematic hold up-risk arises.<sup>4</sup>

The actor controlling the second level of production can be, for example, conceived as a franchiser in an industry where the franchisees have literally no alternative but to participate in the franchise system. In such a situation, terminating franchise licenses, issuing new licenses contesting the home market of an established team, expanding the number of licenses to the detriment of the existing franchisees, changing the franchise conditions (for example, demanding higher portions of team revenues as royalties), and so forth, are means of extracting the economic rent from specific investments in team-development.

Exit-options created by competition are corrective forces that help to this hold up-risk in other industries where franchising is common. The dilemma of major league sports is obvious in this context. Creating corrective competition requires the existence of several leagues that operate under the control of different actors. This, however, partly destroys the market value of the product. Competition leading to several "champions" is not a viable alternative in this case. Of course, finals between different leagues, in which the champion of the "champions" is found out, would solve the problem. Unfortunately, they tend to transform competing leagues into an integrated league.

In order for such finals to make sense, agreements on a common body of rules are necessary. Obviously, a central and independent monitor enforcing these rules is also required. From an organizational perspective there is an additional level of team production that calls for the well-known institutional safeguards against shirking. Actually, this structure can be studied in practice in baseball. In spite of the fact that there are two leagues with joint finals, nobody considers the National League (NL) and the American League (AL) as competing institutions. De facto, baseball is controlled by one integrated organization composed of two "departments".

Quirk and Fort (1999:183-184) are somewhat inconsistent on this issue. On one hand, they repeatedly blame the monopoly league in baseball. On the other hand, they portray the NL and AL as competing leagues. Of course, competition is broad term. In a sense there is also competition between the departments of a firm. Yet, this is not enough. To control for hold up risks in the context discussed here, genuine market competition between leagues is needed. But, in this case also several "champions" would be around.

Therefore, a solution that preserves the monopolistic league status, and at the same time, safeguards specific investments in team-development is required. Vertical integration between the two levels of production is the standard governance-prescription when specific investments are involved (Williamson, 1975; 1979; Klein et al., 1978).

### 3.2 Backward integration: The classical firm

If the league were organized as a classical firm both relevant steps of the value chain would come under unified ownership. In such a setting the hold up-risk loses its relevance because it is the league-owner who invests in the development of his different team-subsidiaries.

However, the classical firm as a form of vertical integration between the two steps of the value chain cannot serve as a role model for major league sports. It is in conflict with the requirement of securing the integrity of the championship race for two reasons. First, it can be argued that the incentives to compete are systematically weaker within the boundaries of a firm than across firms. Spectators may doubt that a true contest is taking place, if the same actor owns the potential contestants. Second, the institution of ownership enables the owner-monitor not only to enforce the rules, but also to plan and direct outcomes, as was shown in the last section. The task of the monitor should be the enforcement of the established rules, and not the strategic influence on behavior and rule-setting. Therefore, an alternative form of vertical integration is required, one that does not imply the enlargement of the narrow task of the monitor, and at the same time, preserves the individual incentives to compete.

### 3.3 Forward integration: The cooperative association

The alternative to empowering the monitor by assigning to him the rights of ownership is to empower the team-owners. From a value chain-perspective this can be described as a form of forward integration from the level of team-development into championship production, whereas the introduction of a league-owner can be seen as a backward integration from the level of championship production into team-development.

The governance structure suited to handle both problems discussed so far is the cooperative association of team-owners.<sup>5</sup> It enables the required forward integration of every single team owner into championship production by granting him representation in all relevant decisions at the league level. The team-owners establish all the regulations governing their industry through majority voting. As a consequence, there is no room left in this structure for a third party in control of the second level of production, who may hold up team owners. Every team-owner is systematically compensated by "voice" for the lack of "exit".<sup>6</sup> At the same time, team-

owners retain their status of independent producers at the level of team development. This means that the individual incentives to compete in the championship remain stronger than they are within the boundaries of a single firm. Moreover, there is no room left for a central league-owner who might strategically plan outcomes.

### 3.4 Internal opportunism in the cooperative association and the dilution of individual property rights as a commitment technology

Of course, the solution of the above-described problems may come at the price of internal opportunism in the cooperative association of team-owners. But, if the number of team owners stays rather small, and, if changes in ownership do not occur too frequently, close social interaction can give rise to an atmosphere that excludes opportunistic behavior.<sup>7</sup> Obviously, league expansion and the rise of corporate ownership in pro sports are at odds with such an atmosphere.

In this context, the deliberate dilution of certain property rights at the club-level serves as a kind of commitment technology by which club owners reciprocally exclude opportunistic behavior. The centralized marketing of television rights can be interpreted as a relevant example in this context.

In all major leagues, club owners have transferred the right to transmit games on a nation-wide scale to a central league agency. Consequently, the league acts as sole supplier in the market for national television rights. For its obvious market power implications, influential economists have constantly criticized this procedure.<sup>8</sup> Unfortunately, the prohibition of centralized marketing would not only increase the number of suppliers in the market for national television rights, as economists usually assume. Again, we have to take into account that there is more to modern pro sports than the production of isolated games. For a television station broadcasting the championship race, single games are just "prime material". The "prime material" is transformed into an entertaining show during each stage of the championship race. The show consists of all sorts of derivative contests like "player of the day", "team of the day", "game of the day", "goal of the day", etc. Since the highlights of every step of the championship race cannot be planned ahead of time, control over the whole supply of "prime material" is beneficial. If a television station contracts its input from only a few teams, it cannot credibly feature the derivative contests that represent aspects of particular stages of the championship. This station has to work with the

inferior content "game" instead of selling aspects of the more valuable content "championship". It follows from this argumentation that there is an additional package value in national television rights.

As long as television stations contract with individual clubs, they will discount every deal because of the fear of not succeeding in getting hold of the sufficient "raw material" required for broadcasting the content "championship". In this setting, individual clubs may even have incentives to try to capture a greater portion of the national broadcasting revenues by threatening to break out of the package. To solve this problem, clubs can commit themselves not to opportunistically break out of the package by transferring their national television rights to a central agency controlled not by individual team owners but by the cooperative association. This arrangement enables pro team sports to sell the more valuable content "championship". Holding the whole package of rights, the central agency prevents hold-up behavior by individual clubs and guarantees control over sufficient "raw material".

In contrast to what economists usually believe, higher prices for the whole package of national television rights do not only reflect higher market power, but also that a more valuable content is being sold.

#### 4. Competitive Balance, Quality Uncertainty and Centralized Marketing

It is a widely held assumption about major league sports that "openness of outcome" constitutes a major aspect of the entertainment value of the championship race. Neale (1964) has discussed this peculiarity of sports competition as the "Louis-Schmeling paradox". From an economic point of view, it was the best thing for Joe Louis to have Max Schmeling as an adversary, someone strong enough to challenge him. The total superiority of an actor in sports competition – in this case, a monopolistic position for Joe Louis – would be ruinous. Herein lies the great difference to "normal" economic

competition, where a monopolistic position leads to increased profits. Neale (1964:2) formulated the right "prayer" for the very successful New York Yankees of his time: "Oh Lord, make us good, but not that good". Obviously, the "openness of outcome" argumentation rests on a quite plausible assumption about consumer preferences. It stipulates that the average consumer draws utility from the excitement generated by close championship races. It is a matter of empirical investigation to find out which level of dominance by a club or a group of clubs is perceived as critical, how the preference for close races might interfere with other preferences – e.g., to see real dominating heroes – and so forth.<sup>9</sup>

#### 4.1 Positive feedback mechanisms and league regulations enhancing competitive balance

Even if we accept the dominant view that openness of outcome increases the economic value of the championship race, the problem is not yet clear. Are not championship races by their very nature always open? If this were the case, there would be no need to further elaborate on the issue. Interventions would only become necessary if openness of outcome is threatened by positive feedback mechanisms that systematically link future success to current success. Unfortunately, the existence of such positive feedback mechanisms leading to a rather stable hierarchical league structure with perennial winners and losers is quite plausible.

All other things being equal, the revenues of a club are related to the size of its home-market and its rank in the championship race. Revenues from gate receipts, local broadcasting, advertising and so on are higher in big markets and usually rise the more successfully a club performs relative to his competitors. Higher revenues can be used to bid for better players, which normally translates into a better performance in the championship race, which again brings in more money. Without intervention, big-city teams would be in a superior position to bid for talent and, therefore, would tend to dominate the league.

The positive feedback mechanism would probably even work when we abstract from market sizes and player salaries for a moment. If there is a strong link between the success of a club in the championship race and the quality of the human capital employed – i.e., the amount of player talent – successful clubs can also be seen as superior screening institutions. Obviously, they are better than their competitors at picking good players. Talented and ambitious players have an incentive to queue up in front of these superior screening institutions. Passing their test, which is well known for filtering quality, constitutes a valuable indicator that increases a player's future employment outlook in the industry as a whole. The longer the queue of applicants, the more selective a club can be. Likewise, the more it increases its human capital, the more successful it will be in the championship. This again increases its reputation as a filter, leading to longer queues and so forth.<sup>10</sup> Obviously, "success breeds success".<sup>11</sup>

If we reintroduce player salaries into the analysis, the positive feedback is even stronger. Weaker clubs seeking to attract talented and ambitious players would have to pay them even larger salary premiums in order to compensate for the loss incurred in signaling value. But, why should they be able to pay more, if success in the championship also translates into higher revenues? If successful clubs get a bigger "piece of the action", they may easily beat the offers of less successful ones. The "success breeds success" mechanism is amplified by the fact that successful clubs have to pay less in purely monetary terms to attract a given amount of playing-talent. Success adds a signaling value to their monetary offers, thereby increasing the probability of future success.

Introducing different market sizes adds the final element to this picture. All things being equal, teams located in big markets earn higher revenues for additional units of playing strength. They can bid higher prices for talent than can small city teams of equal strength. Attracting more talent, they increase their relative playing-strength and trigger the above-mentioned positive feedback mechanisms.

In this context, various league regulations can be interpreted as elements of a strategy to preserve the openness of outcome and prevent the emergence of a stable hierarchical league structure.

First, all major leagues have taken measures to hinder players and teams from behaving according to the above-described positive feedback mechanism. A carefully designed player draft that gives a single club owner the right to bargain exclusively with a certain player for a certain period of time may work in this direction. If draft-rights and the services of drafted players are not immediately and easily tradable, the procedures governing the player draft would prevent the queuing of talent in front of the most successful clubs. When inverse-order picking schemes are implemented, talent is primarily allocated to weaker teams, thus contributing to an equalization of playing strength. This comes at the price of creating incentives for strategic losing that may harm the integrity of the championship race. In order to secure a certain draft-position that would enable it to pick a preferred player, a club might deliberately lose toward the end of the playing season. To curb this, probabilistic elements need to be introduced into the player draft. In practice, picks are distributed by drawing lots. If weaker clubs are allowed more trials, an equalizing influence on playing strength is preserved. Of course, in this case, the incentives to lose strategically are only weakened, not eliminated.

The player draft also can be interpreted as an anti-competitive practice because it restricts mobility among the draft candidates. Yet, to the extent that it prevents players from queuing in front of the successful clubs, it also curbs the described positive-feedback mechanism. All this holds true, of course, when draft rights and the services of drafted players cannot be traded for cash (El-Holdiri and Quirk, 1971).<sup>12</sup> If they can, the effect of the inverse-order draft-pick boils down to subsidizing the weaker clubs in the league (Demmert:37). Assuming profit-oriented decisions, draft rights get traded to the clubs able to pay the most for them, no matter what their initial distribution was at the time of the inverse-order picking procedure. Players are

allocated to the same clubs they would end up with as if there were no draft mechanism at all (Rottenberg, 1956). Therefore, the preferred treatment of the weaker clubs in the inverse-order procedure translates into a plain financial subsidy. Weaker clubs get more "player value", which they may transform into cash by trading draft rights or player services (Canes, 1974:103).

Even if the player draft is nothing but a rude mechanism for subsidizing weaker teams, it is not ineffective in preventing the emergence of a stable hierarchy among clubs. It contributes to the equalization of revenues in the league and enables weaker clubs from smaller cities to pay higher salaries, and thus attract better players. All revenue-sharing schemes smooth out the prize-spread in the championship and partially offset market size differences between clubs. The equal division of national broadcasting revenues is the prominent instrument in this context. With the rise of national television revenues, differences in home market size became less important. However, there is an obvious limitation to introducing such revenue-sharing schemes. Because they smooth out the prize-spread in the championship, they also reduce the incentives to compete.

A third strategy to prevent the emergence of a hierarchical market would be to introduce or preserve a sufficient level of "noise" in the technology of championship production. A weaker relation between success in the championship and the level of the player talent employed makes it less attractive for talented players to queue up in front of successful clubs. The signaling value of getting picked by a successful club erodes if success is a matter of chance rather than a matter of picking the best talent. Likewise, it is less attractive for a club to bid for player talent if success cannot be "bought" and is only a matter of luck. One might therefore conjecture that sports with more probabilistic elements require fewer regulations to preserve openness of outcome than sports where talent more directly translates into championship success. Soccer comes to mind as an example of the first category, since in each game there are only a few chances to affect the outcome by scoring goals. In addition, the influence of the referee is remarkably high and the probability of losing players

during the game through injury is significant, and so on. Lacking these characteristics, basketball seems to range at the other end of the spectrum.

Since playing rules are changeable within certain boundaries without destroying the "true character" of the game in the perception of the fans, more probabilistic elements have been deliberately added in most sports. Take for example the institution of the play-offs. The dominating team with the highest winning percentage over the whole season may well lose the championship only because it did not dominate in the small fraction of games declared as play-offs. Obviously, this weakens the relationship between employed talent and success and also the incentives to invest in talent. Rules such as "sudden death", "the golden goal" or "penalty shoot-outs" also tend to make sport more and more like gambling.

## 4.2 Quality uncertainty and block booking

Let us assume that a league is highly successful at generating close and dramatic championship races. All teams have equal playing strength and the race is open until the very end of the season.

On one hand, this openness of outcome may strongly increase the value of the team-product "championship". But it also creates a systematic problem for the individual clubs. In the extreme case of equal playing strength, every club in the league has the same chance initially to reach any rank in the championship. If the success of a club in the championship race affects the value of the products he can sell, openness of outcome directly translates into quality uncertainty. For example, successful clubs may attract more fan interest simply because people prefer to identify with winners. If this is the case, they are also preferred advertising partners or publicity generators for sponsors and so forth. Success in the championship is exactly that quality in all products sold by individual clubs that is made more unpredictable as playing strength becomes more uniformly distributed in the league. The more open the championship

race becomes, the more buyers of those products will react by demanding larger price-discounts.

There is an obvious trade-off relation between the two marketing levels: increasing the value of the team-product "championship" through competitive balance in the league comes at the price of decreasing the value of all products at the club level through quality uncertainty. Herein lies a potential conflict between collective and individual interests. Influential owners may oppose increased competitive balance in the league because they fear being someday compelled to compensate their contractual partners for the increased unpredictability of their future success. Consequently, they may prefer to produce a rather tedious championship race.

Fortunately, there is a viable strategy to handle this problem. The underlying principle has been described as block booking by Kenney and Klein (1983). It is at least applicable to an important segment of the market. Block booking describes the aggregation of a greater number of product units to a block, which then becomes the new basis for trade. If the significant quality uncertainty displayed at the unit-level decreases at the block-level through statistical aggregation, there is an obvious potential for economizing on transaction costs. Not only is the number of necessary transactions reduced if blocks replace single units, but also quality assessment becomes much easier, leaving less room for difficult bargaining.

Consider the blocking option "all games in the league" as a unit for trading television rights. For a national television station evaluating such an offer, the uncertain performance of individual clubs is rather unimportant. Since performance is to a large extent a relative concept in sports, the bad performance of one club is always compensated by the good performance of others. There is always a winner, a second-place team, and a third-place team, and so on in the championship race. If the market sizes of the clubs do not differ too strongly and people behave in similar ways all over the country, roughly the same drawing potential and "attention" will be mobilized on a national scale, independently of which team wins the race. Quality uncertainty is

strongly reduced for the buyer of this maximum blocking option. Block booking works as an insurance mechanism. If clubs marketed their rights according to this strategy, they would be able to promote openness of outcome at the league-level without incurring losses through the increased performance risk at the club-level.

Obviously, there are barriers restricting the applicability of this maximum blocking option. A closer look at the demand-side of the market makes clear that only one important group of customers will value this option. This group has in common the fact that it can draw profits or utility from the mobilization of drawing potential in the national market. For example, a company operating on a national scale can market its products everywhere in the whole country. As an advertising partner it is more interested in a close and open championship race, keeping the league front-page in the media, than in the performance of one specific club.

The situation is different if the potential customer can only make use of the mobilization of drawing potential in one specific market, as may be, for example, the case for a regionally operating brewery. The risk of poor performance of the regional team cannot be handled by booking all the games in the league. Therefore, clubs have to accept increasing price-reductions in their deals with local or regional customers, as their individual performance in the championship race becomes more uncertain.

Now the discussion about the centralized marketing of television rights can be resumed. If the marketing of television rights on a national scale by a central league agency were prohibited, as economists routinely recommend, clubs would lose their maximum blocking option. The trade with customers operating on a national scale would have to take place with smaller blocks comprising all or a part of the home-games of an individual club. Obviously, at this new level of trade, uncertainty of club performance would no longer be irrelevant. Buyers would be confronted with this uncertainty in every deal and therefore demand discounts. Potential gains from trade would be lost through additional transaction costs due to an increased number of more difficult assessment and bargaining processes.

Consequently, regional and local customers would gain in relative importance in this setting. The products sold to these customers are obviously not affected by the prohibition of the maximum blocking option. The more relative importance these market segments have, the more club-owners would strive to satisfy the respective customer-groups. In order to reduce quality uncertainty for customers with interests focused on the games of a single club, openness of outcome in the championship race might lose relative importance. In this regime club owners would profit if they were able to better "guarantee" a certain performance. Therefore, the prohibition of centralized marketing increases the individual incentives to oppose and undermine regulations aimed at the preservation of competitive balance in the league. It is at odds with team production in major league sports.

The price differentials that have been recorded when changes between centralized marketing and club marketing occurred are not only due to shifts in market power.<sup>13</sup> Centralized marketing also allows buyers of national television rights to have control over "prime material" sufficient for presenting the product "championship" instead of "game". Last but not least, it eliminates quality uncertainty in a very important segment of the market for pro sports entertainment through adequate block booking. The buying power of customers interested in the production of "attention" in the entire market area of the league is not wasted systematically by forcing them into difficult deals with television rights whose value depends on the uncertain performance of individual clubs. The incentives to take care of the team product and produce open and attractive championship races are sustained. If centralized marketing were prohibited because of its market power implications, the efficiency effects would be lost too.

##### 5. The "new" rationales and their relevance for understanding the historical process of "making the majors"<sup>14</sup>

The arguments presented so far show that there are other rationales for understanding the main elements of league organization besides monopoly profits. But, the perspective from which those arguments were derived is largely a normative one. So what is the practical value of the "new" rationales for understanding "what has been really going on out there"?

Obviously, the "making of the major leagues" in practice was and still is a complex historical process and not a great and single act of deliberate design. Therefore, the arguments presented in this paper can only deal with a limited number of organizational elements compared to the whole range of institutional variety developed in the historical process. Moreover, those elements cannot be conceived as isolated institutions. They rather represent complex institutions built upon several other institutional layers. For example, athletes must become professionals playing for money and genuine clubs must become capitalistic firms before we can even think about team-owners who form leagues as cooperative associations.

This means that the historical process of "making the major leagues" got started long before the economic problems ever came up, such as team production, that represent the point of departure for this paper. In all major league sports, an important first institutional step was the arrival of professional players. They were skilled athletes hired as "ringers" to enhance the likelihood of victory in teams initially attached to schools, workplaces or genuine clubs (Leifer:28). Since the hiring of outsiders did not square well with the conception of a closed group typical for such organizations, a segregation between amateur teams and teams employing professionals started to develop. Genuine team-owners took over the functions of capitalistic entrepreneurs in the professional sector arranging games and hiring players. There was much trial and error and there were many failures before some team-owners succeeded in switching from barnstorming to the production of a genuine pennant race.

At this point in the historical process of "making the major leagues", the theoretical analysis presented in this paper can contribute to a better understanding of an

otherwise complex story about people, emotions, scandals, coalitions, etc. It focuses on a set of institutions that were crucial from an economic point of view for enabling the switch from barnstorming to successful team production in professional team sports. This discussion assumes that those institutions were:

- constituting the league as an association of team-owners, which allows for the protection of specific investments and the emergence of a transparent and democratic legislative assembly
- assigning executive power to an independent commissioner enforcing the integrity of the sport
- introducing and enforcing regulations to secure competitive balance in the league

After many difficulties, professional baseball succeeded in making the first two innovations in this list, mostly as a matter of pure chance. Once in place, they turned out to be a robust role model for all American major league sports. This role model has even had an influence in Europe, where pro team sport is slowly gaining independence from strong amateur organizations protected by state agencies, which were able to severely limit institutional development for decades. In Germany, for example, (limited) private ownership of sports teams is in the process of developing and the first steps towards league associations and commissioners have been taken in soccer and hockey. For investors now trying to enter the new (albeit still limited) business areas, American institutions are the explicit role models.

Although first to develop as a pro team sport, baseball lost its position as institutional innovator when it came to the third step described in this paper. By comparison, football took severe measures to secure competitive balance in the league long before other major league sports partially followed its lead. Again, history shows that the groundwork for competitive balance in football was laid at least in part for quite different reasons. Therefore, the significant profits that football reaped from its early institutional innovation after television appeared are in a sense unintended side effects. Again, the economic theory behind those institutions appears to have

functioned, even if it was not deliberately applied as part of institutional design. Let us now look at some details.<sup>15</sup>

### 5.1 The step towards a cooperative association of team-owners

The first major league in baseball was founded in 1871 as the National Association of Professional Base Ball Players (National Association). It was a loose agreement between the representatives of ten professional teams. They met in a Broadway barroom after being excluded from the annual convention by the amateur teams who refused to play (and increasingly lose) against teams operating with ever-changing "mercenaries". The agreement contained two basic institutional innovations. By excluding amateur teams and some weaker professional teams, the National Association made an attempt to admit members on the basis of superior playing ability. But, there was no concept of how to maintain quality standards after teams were admitted as members. A more prominent innovation was the introduction of a pennant race. A five-game match between each pair of members was to be played. The team winning the most matches would receive a championship banner. A \$10 fee had to be paid in advance to finance the banner. The pennant race was optional and one team, the Brooklyn Eckfords, even refused to participate. Obviously, the idea of selling games as a product was predominant.

The National Association never functioned as an effective legislative assembly. According to the presented theory, this was due to the fact that it was not constituted as an association of team-owners. As it was dominated by player-managers and club representatives, the team-owners never perceived it as a viable instrument for protecting the specific investments necessary for team production. Consequently, they were not really engaged in the production of a serious championship. Instead they employed all their resources to attract crowds to single games, without caring what effect this would have on the pennant race. For example they played many games outside the schedule, refused to complete the schedule, engaged in gambling, raided

players in mid-season and so forth. From the beginning, team production was a failure. At the end of the 1871 season, no less than three teams claimed the title.

The first association of team-owners that led to the development of a viable major league was founded 1875. William Hulbert, owner and officer of the Chicago Baseball Club, who was threatened with expulsion from the American Association for raiding prominent players in mid-season, managed to convince the owners that they needed a new organization. Leifer (1995:64) describes this historical event:

"He locked the irate owners in a conference room and mysteriously converted them to the idea of a new league. Hulbert's appeal was simple. He promised to eliminate inflated salaries, players jumping from team to team during the season, gambling scandals, team imbalance, and incomplete schedules [...] the consent he received marked the death of the National Association and the birth of the National League [...] The National League was, for the first time, an association of owners."

The contemporary press strongly criticized "the secret coup" of the owners by which players and others were expelled from the sports organization (Pietrusza, 1991). Despite this critique, the association of owners turned out to be a viable legislative assembly for crafting all the regulations necessary to switch from game to championship production. Owners now had "voice", which allowed them to protect their specific investments in a championship that would be most valuable without "exit".

## 5.2 The step towards an independent commissioner enforcing the integrity of the sport

From the beginning, the owners realized that they needed a centralized executive office in order to implement the regulations issued by the legislative assembly. The

first solution in the National League was to elect a five-man board out of the owner group to govern the league. One member of this group served as president. This solution stayed in place until 1920. In the meantime, a second major league had emerged in professional baseball, the American League. By 1903, both leagues had become partners and the owners of the two leagues worked out a new National Agreement. Organized baseball was now overseen by a National Commission, consisting of the two league presidents and another owner who was elected chairman.

The executive problems that existed from the very beginning had become substantial by 1920. The true source of these problems was the fact that presidents and members of the commission were simultaneously team-owners. Whether in the National League or after 1903 in organized baseball as a whole, they were always suspected of interpreting the rules in their own interest as owners or of acting as instruments of influential owner coalitions responsible for electing them. Considering this incentive problem, it is understandable that team-owners were very reluctant to grant any true executive power to the presidents. As a matter of fact, the presidents were very weak. For example, the decisions of the National League president could be repealed by a four-member board. In addition, owners did not waive their right to challenge presidential decisions in court and in public. They took presidents to court whenever they pleased. Leifer (1995:88) writes about the situation in 1920:

"The difficulty of the war years exacerbated Major League Baseball's leadership problems. In January 1920, Chairman Hermann resigned in the face of mounting pressure. Many National League owners sought to do away with the commission altogether, a wasteful overhead, and successfully blocked refilling the position for a year [...] Another commission member, National League President John Tener, had resigned from his baseball posts in 1918, after Philadelphia's owner, Connie Mack, had defied his order to return a player to the Boston Braves [...] Always weak, the National Commission simply ceased to function."

Baseball had gradually moved towards a state without any centralized authority for enforcing the rules and insuring the integrity of the championship. Then the greatest scandal in the history of baseball occurred. Whereas "a great deal of corruption over the past fifty years had been concealed and gone unpunished by the owners (Leifer:88)" what is today known as the Black Sox Scandal made a real difference in the institutional development of baseball. Eight players of the Chicago White Sox had manipulated the 1919 World Series. The tremendous damage to the team product called for serious and visible action. On November 12, 1920, all owners met and unanimously appointed Judge Kennesaw Mountain Landis as Commissioner of Baseball.

With Judge Landis, the position of Commissioner of Baseball changed exactly to what theory would have predicted. Before Landis accepted the position, he demanded that a new National Agreement be drawn up. It gave the commissioner the full authority to investigate any practice suspected of being detrimental to the best interest of baseball and the power to take punitive action against all actors involved, be they leagues, clubs, officers or players (Seymour:322). In addition, owners had to waive their right to challenge Landis' decisions in public or in court. The remaining two league presidents were to serve only as advisors to the new commissioner.

Landis not only banned the eight Black Sox players from baseball for life, but he made extensive use of his power until his death in 1944. The popular identification of Landis with the integrity of baseball sums up the change that his appointment brought to the sport in the perception of spectators. According to Leifer (1995:89), Landis was never intimidated by the owners. Seymour (1971:422) concludes that Landis made a significant contribution to baseball by keeping the owners in line to a greater extent than before. It is well accepted that a new era of prosperity and success for baseball began with the appointment of Judge Landis as commissioner.

Baseball historians tend to discuss at length Landis' character with all its contradictions and specificities. But anecdotes aside, one should not lose sight of the

fact that the appointment of Landis represents a significant institutional innovation in the development of modern major leagues. For the first time in baseball, a commissioner charged with maintaining the integrity of the sport and with the executive power to do so had been installed in office. Nevertheless, measures taken by an outstanding man like Landis were limited by the institutional framework defining his position. Leifer (1995:91) points to the main limitation: "Yet Landis could only enforce rules and not make them." In the case of his public opposition to the farm system organized by the owners Landis once tried to influence the rules of baseball instead of enforcing them. Even Landis lost.

### 5.3 Steps towards competitive balance

Landis stayed in office for twenty-four years until his death. In the Landis years, no serious attempts were made to undermine the dominance of big-city teams .

"Of the forty-eight pennant winners under Landis, the New York teams supplied twenty-one of them (plus one from Brooklyn). Born under Landis, the New York Yankee dynasty is unrivalled in its domination of baseball, with thirty-three World Series appearances (the New York Giants are second with fourteen appearances.) (Leifer:92)."

Organized baseball had managed to stop barnstorming and to promote stability. Teams had become "attached"<sup>16</sup> to cities and they completely concentrated on the cultivation of local audiences. If local spectators value "winning" by the home-team, then the scarce resource "winning" should be allocated primarily to the big-city teams, who attract larger crowds. In a regime that exclusively cultivates local audiences, big-city teams should dominate the league as long as the condition is met that teams in smaller cities are still strong enough to be contenders and stay in the game. The incentives following from this economic situation are not directed towards equalizing playing strength in the league. Just keeping the teams in smaller cities in the game

becomes the primary goal. Therefore, it is not surprising that baseball did not try very hard to install revenue-sharing schemes and other equalizing devices. For example, the agreement made at the start of the National league that the away team should receive 15 cents per admission was worth less and less through inflation by 1965. Then a very conservative move was made with a 90:10 split of the gate receipts between the home and the away team in the National League and a 80:20 split in the American league.

The next innovator in major league sports was football, which made significant headway towards securing competitive balance in the league. To understand why this happened one has to take into account the completely different circumstances under which professional football sought to become established. Although the American Professional Football Association was founded 1920 and renamed National Football League only a year later, the endeavor would stay rather marginal for a long period of time. This marginality had two reasons: the earlier establishment of baseball as a professional sport and the tradition of football as a prominent college sport.

The first consequence of these circumstances was that professional football had to gain public legitimization by cooperating and not by competing with college football. Professional football badly needed the prestige of established college stars. From the beginning, rules for transferring players were devised that would be acceptable to the colleges. Only players whose class had graduated became eligible for a professional career. The transfer should take place openly. The idea of a reverse order college draft was conceived in 1935, but it took some time before professional football was attractive enough to mobilize great interest among college graduates. Much later football would profit from this cooperative approach. Not only an equalizing device in the league had been installed, but also colleges would have long-term responsibility for the training of young players and the production of stars.

The second consequence of the marginality was that professional football had difficulties moving into big cities already "occupied" by professional baseball or

college football. From the very beginning, professional football teams were less "attached" to cities than baseball teams. Leifer (1995:103) describes the situation as follows:

"Large-city teams, often competing for fans with established college football teams as well as other professional teams, could not be certain of support. Sometimes small, one-sport towns like Pottsville could generate larger crowds. Revenue sharing served as hedge against this financial uncertainty. Teams could set their own schedules, playing games at whichever site was most likely to draw the largest audience. Generous revenue sharing allowed teams to work out mutually advantageous schedules, bringing football to wherever it might attract large audiences. Under this arrangement, some teams survived exclusively on the basis of away-game receipts, competing as travelling teams with no home location."

Seen from this perspective, the generous 60:40 home-away sharing scheme was an insurance mechanism against location risks in a league that had not succeeded in settling down. Its presumably unintended side effect was the preservation of competitive balance in the league. It took some time until this side effect paid off. With the entry of television into professional sport coverage, football was ready to reap the benefits of competitive balance. The importance of local audiences primarily interested in the winning of the home team declined. Now much bigger national audiences valuing close pennants could be mobilized. In 1961, the commissioner of the NFL, Pete Rozelle, succeeded in persuading Congress to extend baseballs antitrust exemption to the other sports. The NFL owners not only agreed to immediately pool their individual franchise broadcasting rights, but also to equally share the revenues.

The development of the NFL as the greatest television success in sports agrees substantially with the theory presented. Aside from its other effects, the pooling of broadcasting rights allows for block booking, which serves national audiences

interested in the pennant. The equal division of broadcasting revenues further secures competitive balance and makes the pennant race close.

## Footnotes

- 1 See e.g. Noll (1974) for an early overview. See Quirk and Fort (1999) for a recent exposure of this line of thought.
- 2 Reverse-shirking is an expression used by Alchian and Demsetz (1972:791), but in a slightly different context. They refer to over-investment in training athletes and developing teams in the special setting of rank-order competition. See Canes (1970;1974) for the original treatment of these issues in major league sports.
- 3 See Quirk and Fort (1992:294-361). As a counter-example boxing may come to mind. Several associations produce their own "champion". However, boxing suffers from the deficiency that every proposed "champion" is not the only one and thus not a true champion in the view of the spectators.
- 4 See Williamson (1975; 1979) on the role of specific investments as hostages.
- 5 The explanation of the cooperative association as a governance structure suited to safeguarding specific investments and retaining the economic independence of suppliers at the same time is due to Bonus (1986).
- 6 See Hirschman (1970) for this analogy.
- 7 See Bonus (1986:326-328) for a general discussion of this issue.
- 8 See Quirk and Fort (1999:44-47) for a recent treatment of the issue.
- 9 See the extensive literature on these matters, e.g., Cairns et al. (1986:17-21); Quirk and Fort (1992:240-293).
- 10 Winston (1999) presents a similar argument for universities. They signal their quality as institutions of higher education by being highly selective with regard to their student-input.
- 11 Frank and Cook (1995) have used the term "success breeds success" in the context of "winner take all" markets.
- 12 Note that the barriers to the trade of draft candidates for cash need not be laid down as explicit league regulations. Because there were no such explicit regulations, most authors argued along the lines of the Coase theorem that the draft had no effect on the allocation of talent. Daly and More (1981) looked at the empirical evidence and found out that player-cash transfers played a negligible

role in practice. Owners simply followed the tradition of not selling first-line players for cash. Therefore the draft system had an effect on the allocation of talent despite the views expressed by economists. Implicit rules like the above-mentioned tradition may substitute explicit regulations.

- 13 Quirk and Fort (1999:45-46) comment on two such cases. Before congress passed a bill exempting league-wide television contracts from antitrust prosecution all the teams in the NFL had individual TV contracts. In 1961 under this regime, total TV income for all NFL teams amounted to \$3.5 million. In 1964 under the new national TV contract, the NFL earned \$16.2 million. In 1984 the Supreme Court ruled that the National Collegiate Athletic Association (NCAA) violated the Sherman Act in negotiating TV contracts for all college football teams. After all teams negotiated their contracts individually, it turned out that the numbers added up to only half of the \$65 million the NCAA had been able to get before.
- 14 This is the title of an excellent book on the transformation of team sports in America by Eric M. Leifer (1995).
- 15 The historical events described in the following sections are mostly taken from Leifer (1995).
- 16 The term "attached" is repeatedly used by Leifer (1995) to denote a stable team-city-relationship.

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