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The Organization of Professional Sports Leagues

A Comparison of European and North-American Leagues from the Perspective of Platform Organization

in:

Sport und Sportgroßveranstaltungen in Europa – zwischen Zentralstaat und Regionen

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Helmut Dietl and Tobias Duschl

Introduction: Different Symptoms

The economic success of professional sports leagues differs significantly around the world. In terms of revenue, European football teams are the most successful sports enterprises.[1] According to Table 1 Real Madrid is the strongest revenue generating club worldwide with total revenues of 366 million Euros in the 2007/2008 season followed by Manchester United, FC Barcelona, and Bayern Munich, each generating annual revenues of around 300 million Euros. In the 2007/2008 season there were six European football clubs which generated revenues of more than 250 million Euros. Surprisingly, this threshold is not exceeded by any team from one of the four North American Major Leagues, the Major League Baseball (MLB), the National Football League (NFL), the National Basketball Association (NBA) and the National Hockey League (NHL).[2] Only a total of three teams from these four leagues exceed the 200 million Euros threshold. Obviously, the top clubs in European football are much more effective in terms of revenue generation than their North American counterparts.

[1] Deloitte (2009)

[2] Information on the Major Leagues taken from www.forbes.com.

Table 1: Top Revenue Generating Sports Clubs – International Comparison

Rank	Team	Revenue 2007/2008 (in Euros)
1	Real Madrid	366,000,000
2	Manchester United	325,000,000
3	FC Barcelona	309,000,000
4	Bayern Munich	295,000,000
5	Chelsea	269,000,000
6	Arsenal	264,000,000
7	New York Yankees	240,000,000
8	Washington Redskins	233,000,000
9	Liverpool	211,000,000
9	AC Milan	210,000,000
10	New England Patriots	201,000,000
...	NBA top: New York Knicks	133,000,000
...	NHL top: Toronto Maple Leafs	102,000,000

Source: Deloitte (2009); www.forbes.com.

Despite lower revenues, however, North American clubs are, on average, much more profitable than most European teams.[3] In addition, they also have significantly lower debt/equity ratios than most European clubs. For years, European football has been characterized by high levels of financial instability. A large number of clubs are operating on the edge of bankruptcy. The majority of clubs accumulates ever increasing amounts of debt. The clubs of the English Premier League, for example, the most successful national league in Europe, face total debts of 2.5 billion Euros , with Chelsea and Manchester United leading the list of debtors with total debts of 555 million Euro and 553 million Euros, respectively.[4] Manchester United reported a loss of 35.5 million Euros for the

[3] See, for example, www.forbes.com.

[4] Data obtained from www.guardian.co.uk, June 2nd, 2009.

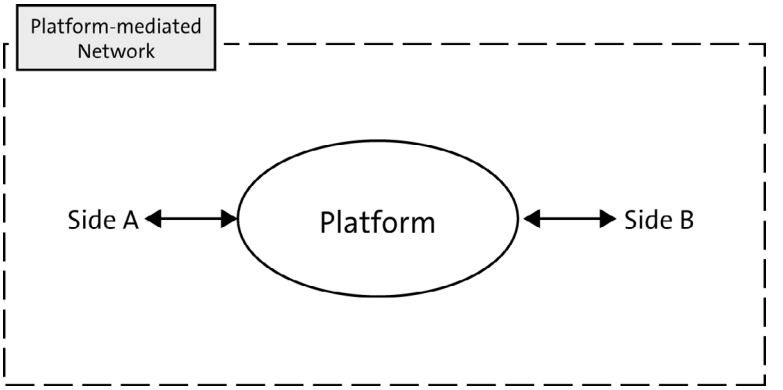
2007/2008 season, the season in which the team won both the English Premier League and the UEFA Champions League competitions.

There are different approaches to explain the causes for these different economic and financial symptoms.[5] In this article, we provide a new explanation for the causes of these symptoms based on the theory of platform organization, a theory that is relatively new and has not yet been applied to professional team sports to the best of our knowledge.

The remainder of this article is organized as follows. The second section introduces the theory of platform organization. The third section shows how this theory can be applied to sports leagues. The forth section compares European football leagues with North American Major Leagues in terms of platform organization. The last section concludes.

Platform Organization: A Short Introduction

Figure 1: Platform with Two Market Sides



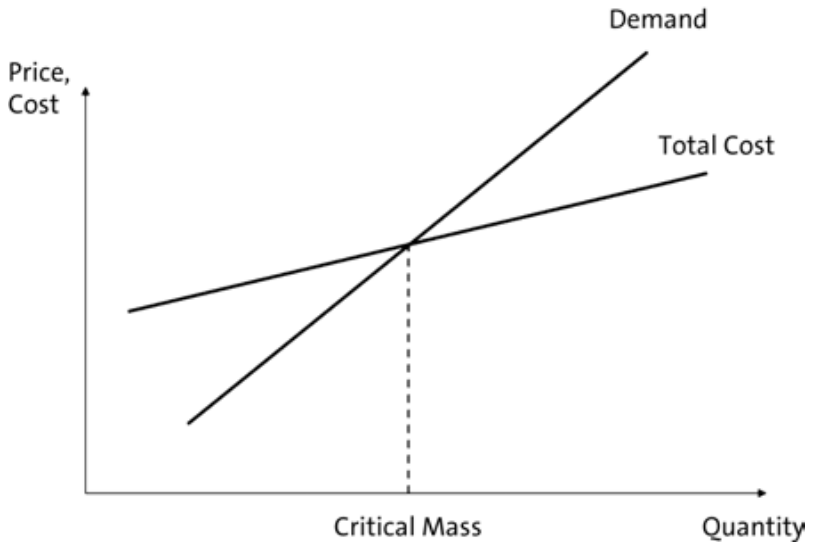
[5] Some discussion on this topic can be found in for example Feddersen/Maennig (2008), Dietl/Franck (2007), and Szymanski/Zimbalist (2007). Also compare Fort (2000) for a more general look at the differences between European and North American sports.

As illustrated in Figure 1 a platform can be defined as any infrastructure that enables two or more market sides to interact with each other. Typical examples of platforms are videogame consoles, which enable game developers to interact with consumers; credit cards, which enable merchants to interact with customers; and dating platforms, which enable men and women to find partners. The interactions which are enabled through platforms are usually characterized by network effects.[6]

Network Effects

Network effects occur whenever the average willingness to pay of consumers increases with total (expected) demand. The resulting demand curve is illustrated by Figure 2.

Figure 2: Network Effects and Modified Demand Curve

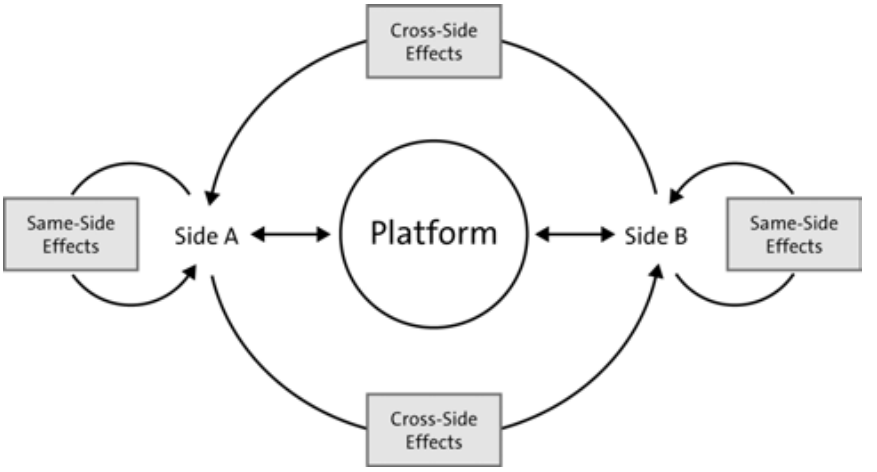


[6] See Rochet/Tirole (2003) and Eisenmann/Parker/Van Alstyne (2008).

Platform-intermediated networks are often characterized by same-side and cross-side effects. Same-side effects describe the existence of a direct network effect, where the increase in size of one market side leads to an increased attractiveness for others to join this market side. This same-side effect can be illustrated with the example of an e-mail program. The more users connect to such a program, the more valuable the system becomes for all users, for example all members of the e-mail-network.

Cross-side effects occur whenever each additional network member on one market side of the platform increases the average value of network members who participate on another market side. The auction platform eBay provides an example for cross-side effects. Each additional buyer who connects with eBay adds market liquidity and therefore increases the value of the platform on the sellers' side. Cross-side effects often work in both directions as in the eBay example. Each additional seller provides additional variety and thereby increases the value of the platform on the buyers' side. Figure 3 highlights the difference between same- and cross-side effects.

Figure 3: Different Kinds of Network Effects



Open and Closed Platforms

Platforms may be characterized as open or closed. Open platforms do not impose restrictions on network membership. A typical example of an open platform is Linux. The source code is publicly available and can be used and/or upgraded by everybody. Developers of Linux applications do not have to pay license fees nor are they restricted in any other way. Microsoft, on the other hand, originally designed its operating system as a closed platform by keeping the source code private and by restricting access.

The distinction between openness and closeness of a platform is not dichotomous, but rather gradual in kind. Platforms may be more or less open. The degree to which a platform is open or closed has important implications for value creation and value appropriation.[7] Open platforms enhance network mobilization by increasing variety and by mitigating hold up problems. Open platforms do not restrict access or charge licensing fees. As a result, it is easier and more attractive to join an open platform. Consider the example of video gaming. Ceteris paribus game developers will prefer to develop games for open instead of closed video console-mediated platforms. As more game developers join the platform the variety of compatible video games increases which, in turn, increases the overall value of joining the platform for consumers. As a result of these cross-side effects, more consumers will buy the respective video console. As the installed base of video consoles increases, it will become even more attractive to develop console-compatible video games. This snowball effect accelerates network mobilization.

Open platforms are also in a better position to overcome hold up problems. A hold up problem occurs whenever members on any side of the platform-mediated network make platform-specific investments. These investments lock members into the platform-mediated network and make them vulnerable to hold up attacks. Consider the video game example once more. If consumers buy a certain console they can only play video games which are compatible with their respective console. If the firm selling that console also has exclusive property rights to license game developers, users must fear that the firm will extract all consumer surplus by charging high prices for compatible video games even if this firm tries to lure consumers into a lock-in by offering the console at below-cost prices. Rational consumers will anticipate the

[7] See Eisenmann/Parker/Van Alstyne (2006); Eisenmann/Parker/Van Alstyne (2008); Hagiu (2009).

hold up danger and refuse to join the network. The only credible commitment to signal consumers that their platform-specific investment does not result in hold up attacks by the platform owner is to open the platform. In the video game example, the platform owner has to create competition in the market for console-compatible video games by granting relatively unrestricted licenses to a large number of game developers.

While the openness of platform improves value creation through acceleration of network mobilization, it also impairs value appropriation. In open platforms, property rights are attenuated and less concentrated than in closed platforms. The attenuation of property rights in open platforms limits the opportunity of value appropriation. In closed platforms, on the other hand, property rights are much more concentrated. This property right concentration facilitates value appropriation. The open platform Linux and the historically closed platform Windows provide an illuminating example for the differences in value appropriation. Microsoft was able to extract much more surplus than the organizers of the Linux network.

Sports Leagues as Platforms

Sports leagues are platforms in the sense that they provide an infrastructure which enables different market sides to interact with each other. The most relevant market sides and the underlying network effects are highlighted in Figure 4.

In professional team sports, clubs invest in players to form competitive teams. These teams might play against each other on the basis of bilateral contracts. Such a form of competition which originally existed, for example, in baseball where teams toured around the United States of America (U.S.) as so-called barnstormers to play local teams is, however, much less attractive than a league-mediated competition. The league platform enables teams to create organized championship races.[8] These championship races are much more attractive than isolated individual games between two teams.[9] Championship races create suspense and excitement beyond single games. They produce regular standings and rankings, performance statistics, historical comparisons,

[8] For an extensive analysis of the purposes of a league refer to Noll (2003).

[9] This increase in demand has been derived by Borland/Macdonald (2003) in an attempt to determine factors influencing the attendance of sports events.

commentaries, gossip, et cetera. In league-mediated networks, teams form one market side. This market side is characterized by same-side effects as each participating team attracts more teams. As a result, leagues are "natural" monopolies. All teams want to participate in the same league because of these strong same-side effects.

Teams attract fans, who form another market side in league-mediated networks. This cross-side effect results in more fans as more teams join the league. The market side of fans is also characterized by strong same side effects: fans attract more fans. This same-side effect is based on two factors. First, sports events are a "mob good"[10] in the sense that fans do not only consume the on-field excitement, but also the atmosphere and noise created by fans. In this sense, each additional fan is a co-producer who increases the overall value of sports consumption. Second, fans like to communicate and interact with each other. This communication and interaction requires a minimum amount of investment into consumption capital.[11] Without such an investment, fans will not be able to appreciate the full value of sports consumption. Spectators who watch a baseball game between the New York Yankees and Boston Red Sox, for example, cannot appreciate the full value of this contest unless they know the history of this rivalry. Similarly, fans who watch FC Barcelona against Real Madrid, Celtic versus Rangers, or Inter against Juventus will extract more value if they have built up relevant consumption capital; for example, know the history and circumstances of these rivalries. The more fans have invested into consumption capital the higher will be their utility derived from attending or following a sports contest. More importantly, the more fans have made similar investments into consumption capital, the more utility these fans can extract from these investments by communicating and interacting with each other.

But fans do not only attract fans, a same-side effect. They also attract the media, a cross-side effect. Each additional fan increases total demand for media coverage of league affairs. If more fans follow a football league, the media will devote more resources, newspapers and magazines more articles, radio and television more airtime and Internet portals more content, to provide fans with information about the league.

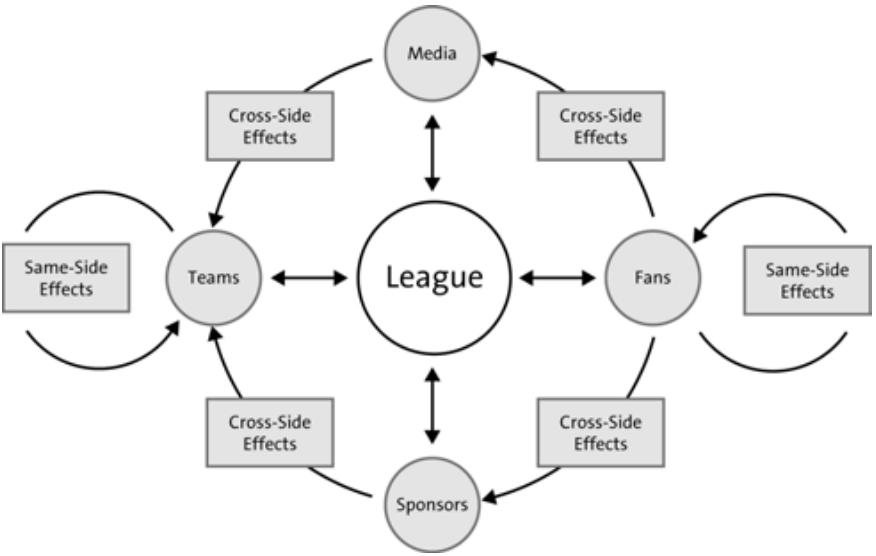
[10] Faith/DeSerpa (1996).

[11] See Stigler and Becker (1977).

The media side of the league-mediated network initiates two additional cross-side effects. First, the media attracts more teams. Second, the media attracts more fans and, third and most importantly, the media attracts sponsors. To be sure, sponsors are also directly attracted by fans. The indirect effect initiated through the media, however, is much more powerful than the direct effect. The power of the media effects are based on the transmission of information. This transmission gives the media effects a huge leverage. The media enables the league to overcome its traditional limits of space and time when marketing its product, for example the championship race. Without the media, the number of fans who can follow a game was limited by stadium capacity. Today's digitalization of content practically enables everyone to follow a league's championship race worldwide. With the help of the media, leagues can produce unprecedented levels of worldwide attention.

As indicated, the attention created by the league with the help of the media attracts sponsors. These sponsors, in turn, contribute to league revenues and therefore attract additional teams. The circle of same-side and cross-side effects closes.

Figure 4: Market Sides of Sports Leagues and Network Effects



European versus North American League Platforms

A comparison of European football leagues versus North American major leagues reveals many differences. The most important differences are summarized in Table 2.

Table 2: Comparison of European and North American Leagues with Respect to Openness and Closeness of Platform

European leagues	North American leagues
Most clubs are members' associations (no residual claimants)	Most clubs are privately owned
Main objective: win maximization	Main objective: profit maximization
Open leagues: Promotion and relegation	Closed leagues: Expansion through buy-in
Full market coverage	Rationing (e.g. no NFL team in L.A.)
Relocation only in exceptional cases	Frequent relocations
No salary cap	Salary cap
à Value creation	à Value appropriation

In Europe, sports clubs were traditionally organized as a so-called members' association. This legal form is characterized by the absence of residual claimants. In a members' association, nobody is entitled to claim the association's profits. In fact, members' associations are usually nonprofit organizations which are primarily funded by donations. If there were residual claimants, donors would be reluctant to donate resources to the association. The commercialization of sports led to the incorporation of many clubs. Despite this reorganization, however, most of the largest clubs are either still organized as members' associations (for example Real Madrid, FC Barcelona) or controlled by members' associations (for example *Bayern Munich* and almost all other German clubs).[12] Members' associations are governed by democratic principles. The members elect representatives and vote on all major issues in regular meetings. Clubs which are organized as members' associations usually cannot be sold. This re-

[12] For information on the consequences of football teams as membership associations see Dietl/Franck (2007).

striction protects fans against the relocation of their favourite team. Such relocations are quite frequent in North American leagues, where most teams are owned by wealthy individuals. As residual claimants these owners can extract part of the revenues generated by their team.

From the perspective of platform organization, European clubs, on average, are much more "open" than their North American counterparts. In Europe, many fans can become a member of their favourite club and exercise their voice by voting on all important issues. In North America, ownership of clubs is "closed." The open organization of European clubs enhances value creation. European fans are better protected against hold up in the form of relocation or in the form of revenue extraction than fans of North American major league clubs. As a result, European fans are more willing to make club-specific investments by becoming a (usually) life-long supporter of their favourite team. The absence of residual claimants makes it also more attractive for sponsors to "support" a team. Sponsors are also vulnerable to hold up. Most importantly, sponsors benefit from the on-field success of the sponsored team. They do not want to invest in or donate money to a club which is controlled by residual claimants. These residual claimants can transfer resources away from the team into their own pockets. Clubs which are either organized as members' associations or at least controlled by members' associations protect sponsors against such forms of hold up and guarantee that all proceeds are (re-)invested into the quality of the team. From this perspective, it is no surprise that those European clubs that have no residual claimants collected by far the largest sponsorship contributions in 2007/2008 (Bayern Munich, Real Madrid and FC Barcelona). According to Sport+Markt, a sports consulting company, Barcelona and Madrid are also the clubs with the largest fan bases worldwide.[13] The club's motto "more than a club" stands not only for attractive football, but also for solidarity, freedom and democracy. The club is "owned" by more than 160,000 members.

As a result of the absence of residual claimants in many European clubs, the main objective of most clubs is win maximization. All revenues are dedicated to improve the quality of the team in order to maximize the probability of winning. Privately held clubs with residual claimants, on the other hand, usually maximize profits. Fans and sponsors, of course, are more attracted by win maximizing than by profit maximizing clubs.

[13] See www.sportundmarkt.de for a summary on Europe's most popular football clubs.

In Europe, competitions are organized in league hierarchies. In football, for example, the best European teams compete in the UEFA Champions league in addition to their national leagues. At the national level, there exists a hierarchy of leagues, starting from the top division down until the weakest amateur level. Basically, every team has the possibility to advance from the lowest level trough subsequent promotions up until the top level (and vice versa). Economically, there are no restrictions to "market entry".[14] European leagues are open in this direct sense. North American leagues, on the other hand, are closed. Market entry is not possible without the consent of the existing teams. New teams usually have to buy themselves into the league if they want to compete. There is no system of promotion and relegation.

Free market entry guarantees full market coverage in Europe. All major agglomerations have at least one team in the top divisions. Full market coverage assures a maximum level of value creation. No potential revenues are forgone. This situation is contrary to the North American major leagues where the number of teams and, as a consequence, market coverage is rationed. The NFL, for example, has no team in Los Angeles, the second largest agglomeration. Market rationing, however, increases value appropriation at the expense of value creation. The threat of relocation, which is an important weapon of club owners to maximize their bargaining power in negotiations with local authorities over team subsidies, such as stadium grants, tax advantages, et cetera, is only credible as long as some major markets are without a team.[15] If all major markets were covered, the threat would not be credible.

Another major difference between European and North American leagues is the regulation of player salaries.[16] In Europe, player salaries are not restricted in any sense. There are no limits on individual or collective salaries. In North America, on the other hand, all major leagues have salary restrictions. These restrictions are in line with the main objective of profit maximization. Salary caps may be regarded as a form of hold up against players who made specific investments into their playing skills. These investments into playing skills are specific in the sense that they become more or less worthless if the player does not compete in the respective sport. As long as the league has a

[14] For closer coverage of the characteristics and consequences of the promotion and relegation system cf. Noll (2002) and Szymanski/Valletti (2005).

[15] For the interaction of sports teams and host cities, compare Euchner (1993), for example.

[16] For analytical approaches to salary caps, see Dietl/Franck/Nuesch (2006), Dietl/Franck/Lang/Rathke (2008), Dietl/Lang/Rathke (2009), and Késenne (2000).

monopoly on its sport, players have no outside option and have to accept league regulations. Ceteris paribus, athletes prefer to be trained in sports where no salary caps are enforced.

Taken together, European leagues are much more open than the North American major leagues. This difference explains why European clubs outperform their North American counterparts in terms of revenue generation, i.e. value creation, and why North American clubs are much more profitable than most European clubs. European leagues are organized as open platforms which invite and facilitate participation from all relevant market sides. The absence of concentrated property rights and the possibility of free market entry, however, limit the opportunities of value appropriation.

Conclusion

The economic and financial performance of European and North American major leagues differs significantly. Top European clubs outperform their North American counterparts in terms of revenue generation. North American clubs, however, are much more profitable than European clubs. Most European clubs have excessive debt and suffer chronically from high levels of financial instability. These contrary performance symptoms are the result of differences in league organization. Professional sports teams form leagues to organize championship races. Moreover, however, a league may also be regarded as a platform that enables teams not only to interact with each other, but also with participants on other market sides. From this perspective, leagues can be analysed as platforms that enable teams, fans, the media and sponsors to interact with each other. These platform-mediated interactions are characterized by strong same-side and cross-side network effects.

As platforms, European leagues can be characterized as "open," not only in the sense of promotion and relegation, but also in the sense of attenuated/dispersed property rights and free access on all market sides. North American leagues, on the other hand, are organized as closed platforms with exclusive/concentrated property rights and high entry barriers on all market sides. According to the theory of platform organization, open platforms outperform closed platforms with respect to network mobilization. Free market entry combined with the absence of residual claimants enhances network mobilization by increasing variety and mitigating hold up problems. As a result, leagues

which are organized as open platforms can generate larger revenues than closed leagues. At the same time, however, open leagues have a strong disadvantage with respect to value appropriation. The factors which are favourable for value creation by network mobilization limit the potential for value appropriation. Closed leagues with concentrated property rights and well enforced residual claims can appropriate larger parts of total value creation.

The analysis of professional sports leagues from a platform-theoretical perspective and related discussion on openness and closeness of the platform provides a new tool to understand the divergence in value creation and appropriation in Europe and North America. The relationships between all participating market sides and individual league's governance structures have to be considered in order to explain the financial performance of professional sports teams. The platform approach intends to set the foundation for this analysis.

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