CENTRE DE DROIT ET D'ÉCONOMIE DU SPORT

Sport has become omnipresent in our daily lives, which justifies a critical analysis of the socio-economic stakes it represents: are football players paid too much? How much do the Olympic Games cost? Is European football bankrupt? Is sport good for your health? Are we running out of volunteers? Is professional sport rigged? Beyond its economic dimension, it is essential to improve the consideration of the social dimension of sport, whose total value goes far beyond its market value. As the traditional instruments of orthodox economic calculation are ill-suited, a socio-economic analysis of sport is needed. In 8 chapters and 43 short articles, this book offers a synthesis of knowledge with a presentation of the problems and controversies raised, also referring to numerous examples from field studies.

This didactic book is intended for students and researchers, but also for professionals in sporting institutions as well as amateur athletes.

Jean-François Bourg is a doctor of economics and a researcher at the Centre de Droit et d'Economie du Sport (CDES/OMIJ, University of Limoges).

Jean-Jacques Gouguet is Professor emeritus in economics and regional planning at the University of Limoges. He is also the Scientific Director of Economic Studies at CDES/OMIJ, University of Limoges.

OMIJ Observatoire des Mutations Institutionnelles et Juridiques

Université de Limoges

9 782842 878610

ISBN : 978 284 287 861 0

22 €

Jean-François Bourg
Jean-Jacques Gouguet

Socio-economics of sport A critical analysis

Pulim

Jean-François Bourg

Jean-Jacques Gouguet

Socio-economics of sport

A critical analysis

www.cdes.fr

A SPORTS LAW AND ECONOMICS COLLECTION

Pulim

Socio-economics of sport.
A critical analysis.

Jean-François BOURG has a doctorate in economic science, and has been an associate researcher at the Centre de Droit et d'Economie du Sport (CDES, OMIJ/University of Limoges) since 1979, and a professor at the University of Limoges since 1988. He was an expert on the Council of Europe's Committee for the Development of Sport (1992-1993) and has been a member of the International Association of Sports Economists since its creation in 1999. He is also the author of about 100 academic publications in German, English, Spanish, French, Portuguese and Russian, including 16 books.

Jean-Jacques GOUGUET is a Professor Emeritus in Economic Sciences and regional planning at the University of Limoges. He has been the Scientific Director of Economic Studies at CDES for more than 25 years. He is one of the world's leading experts in the field of economic impact and social utility studies of mega-sport events. Founder and vice-president of the International Association of Sports Economists (I A S E), he is the author of a dozen books and numerous articles in collective works and specialised journals in the field of sport. He is also a member of the editorial board of both the Journal of Sports Economics (JSE) and the Revue d'économie régionale et urbaine (RERU) as well as Jurisport.

Centre de droit et d'économie du sport - CDES
13 Rue Bernardaud – 87100 Limoges
Tél : + 33 (0)5 55 45 76 00
contact@cdes.fr – www.cdes.fr

Translation: **Michael Kennedy**

Jean-François BOURG Jean-Jacques GOUGUET

Socio-economics of sport. A critical analysis.

Pulim

Published with the financial support of the OMIJ

5 rue Félix Eboué – 87031 Limoges cedex
Tél : 05.55.14.92.26 – mail : pulim@unilim.fr
https://pulim.unilim.fr

INTRODUCTION

This didactic book for students, researchers, and decision-makers in the field of sport aims to present the main themes that are at the centre of debates concerning the analysis of a phenomenon as complex and omnipresent as sport. First, it is necessary to clearly define what is meant by the term 'sport', which covers radically different content. Secondly, it is necessary to determine which method of analysis is most relevant to the understanding of this differentiated reality. By combining these two issues, it is possible to identify eight major themes that allow us to delimit the field of our socio-economy of sport. Finally, we have selected, without claiming to be exhaustive, 43 specific articles considered to be the most representative to characterise each theme.

1 - Definition of the field of analysis

The first difficulty encountered in drawing the contours of a field of analysis lies in the great diversity of meanings attributed to the term 'sport'. According to the authors, it is a polysemous concept whose content refers to very diverse realities. For some, the field of sport is very narrow and is reduced to regulated competitions organised by official sports institutions. For others, the field of sport is practically unlimited in that it includes any physical activity.

Such heterogeneity of content means that the word sport, in itself, is devoid of meaning. It will therefore always be necessary to specify which sport we are talking about: professional sport, high-level sport, competitive amateur sport, leisure sport, or sport for health and well-being. Therefore, it is not legitimate to use the same term 'sport' to describe such different realities, which do not follow the same logic and which do not require the same analysis and evaluation tools. For example, the sports business has become an industry like any other that obeys the logic of the market and the search for maximum profit. On the other hand, recreational sport adopts another philosophy in the service of the search for well-being. Amateur practitioners are more concerned with pleasure, aesthetics, conviviality and culture than with victory and performance. Consequently, the socio-economic stakes will be radically different depending on the type of sport concerned:

Professional sport has gradually become globalised, and is the object of considerable financial stakes involving various major stakeholders such as sponsors; broadcasters; social networks; manufacturers of sporting goods and marketing agencies. Sport is becoming an economic activity like any other, even if it is recognised as having a certain number of specificities that allow it, for example, to partially evade anti-trust laws in the United States or competition law in Europe.

Competitive amateur sport is characterised more by its social functions. First, there is the presence of volunteers who make it more possible to guarantee better access to sport when compared to an economic situation in which the market would be allowed to run free. Then there is the production of positive externalities of considerable value to society: education; health; citizenship; social ties; well-being, etc.

Recreational sport presents both economic and social challenges due to the diversity of motivations of practitioners. The practice of mass sport outside official structures today represents a significant turnover, particularly due to the purchase of more or less sophisticated materials and various equipment. In addition, this type of practice also generates multiple positive externalities in terms of individual well-being and good living together.

In order to evaluate the benefits to society of this variety of sporting events and practices, it is necessary to develop instruments adapted to each situation. Beyond the economic dimension, it is particularly important today to improve the consideration of the social dimension of sport, the total value of which goes far beyond its mere market value. The traditional instruments of economic calculation are not very suitable, which is why a socio-economic analysis of sport is necessary.

2 - Choosing a type of analysis

Deep divisions exist in economic analysis, leading to radically different explanations of the phenomenon studied. Traditionally, the history of economic thought distinguishes between four paradigms:

- Marginalism is based on the self-regulated functioning of markets balancing the supply and demand of rational individuals;
- Marxism denounces the exploitation of workers by a system that is nonetheless condemned by the downward trend in the rate of profit;
- Keynesianism, which advocates state intervention to compensate for market failures and to revive the economy through the principle of effective demand;
- Institutionalism puts power and conflict at the heart of economic life.

The economics researcher is condemned to choose one of these paradigms, which constitute obligatory visions of the world, all based on specific values and ideologies. Moreover, these different economic doctrines are opposed on a fundamental question relating to the conception of science. For the neoclassical economists of the first school, economics is a science in its own right, just like physics. To this end, simplified hypotheses must be posed to allow the construction of rigorous models which are often unrealistic but whose validity also becomes limited by the hypotheses in question. Alternatively, for the proponents of applied economics of the other doctrines, it is necessary to try to theorise complex phenomena without being cut off from reality. These are the neoclassical economists who today constitute the orthodoxy and who always defend scientificity at the cost of irrealism.

The economic analysis of sport has not escaped such divisions, and can be divided into two groups corresponding to the two research traditions: on one side, the economic orthodoxy which favours a formalised microeconomic approach based on methodological individualism and producing hypothetico-deductive models that are the only ones reputed to be scientific; on the other, the economic heterodoxy which claims a more institutionalist and less formalised approach to analysis. It is this second approach that seems to us to be the best adapted to the understanding of the sports phenomenon. Indeed, sport cannot be reduced to competition and spectacle alone. It occupies a much more important place in modern societies, notably because of its numerous social functions. An economic analysis that is too narrow is not capable of properly understanding this dimension. This is why the different chapters of this book contain elements denouncing the inadequacy of orthodox approaches and showing interest in promoting heterodox analyses instead.

3 – The choice of themes

Defining our field of the socio-economics of sport is not easy, as the subject of sport is so diverse and complex. Choices had to be made and we have selected eight major themes:

- sporting institutions
- the financing of professional sport
- the glorious uncertainty of sport
- the professional sports labour market
- the globalisation of sport
- the economic benefits of sport
- the social functions of sport
- the dark side of sport

4 – The modalities for dealing with each theme

To characterise each of the themes, we have selected a certain number of articles considered indispensable, without claiming to be exhaustive in covering the entire field. Rather, we have selected the items that appeared to be the most representative in the debates on each of the eight issues. These particular entries are not hierarchical and are listed in alphabetical order in each chapter. For example, the chapter "The Globalisation of Sport" will be dealt with under the following four specific headings: "Global Public Good", "Macroeconomics of International Sports Success", "Globalisation of Sport" and "Soft Power".

Each of these articles is intended to be a true synthesis of knowledge with a presentation of the issues and theses or controversies that it raises. In short articles and a pedagogical and didactic manner, the essential notions are developed with their meaning, their context and their scope. Each entry is accompanied by a bibliographical reference to deepen and extend knowledge. Correlates are also proposed to illustrate the interdependence of the themes and to extend the reflection. This book is intended to be an original and informative work tool for a better understanding of contemporary sport and its singularities. It is intended for students and researchers as well as professionals in sporting institutions and sports enthusiasts.

CHAPTER I – THE SPORTING INSTITUTIONS

Sport is primarily a highly regulated activity that has given rise to the creation of numerous sporting institutions. For example, in the federal field of amateur sport, we find the pyramid of sport going from the club to the regional committee, to the national federation, and finally to the international federation. Similarly, in the field of professional sport, specific institutions participate in the governance of the activity. A major topic of debate is whether the American closed league model - as opposed to the European open league model - is the most efficient.

Amateur sporting clubs: what economic model?

The professionalisation of sport has profoundly changed the legal status of sporting clubs. For a very long time in France, the dominant status of clubs was that of associations governed by the law of 1901. From the 1980s onwards, professional clubs were obliged to adopt new statutes, which, in the 2000s, are closer to the common models of commercial companies in other economic sectors (in particular the professional sports limited company, SASP). As commercial enterprises are subject to management control, professional sports clubs are obliged to publish accounting documents that reflect their situation. It is, therefore, possible to analyse the economic condition of professional clubs and the problems they face due to the specific nature of the sporting activity, which is the subject of numerous articles in this book.

The same cannot be said for amateur sports associations, which are much less well known even though they are the very basis of the French sporting system. Based on the work of CDES on the economic model of sports associations, it is possible to analyse the characteristics of such a model, its heterogeneity according to the different types of clubs and the stakes involved in its future evolution.

The economic model of French amateur clubs

- ***Traditional model***

The main financial resources of amateur clubs are membership fees and income from activities, which together account for about three-quarters of their total revenue. The rest of the income is made up of public funding, sponsorship, and donations. This distribution is the result of an evolution that has seen an increase in the relative weight of income from activities and a decrease in the relative weight of public subsidies. This development reflects the return of the austerity policies implemented after the subprime crisis in 2008 and the reduction in public spending, as well as the search by clubs for new revenue from the private sector to compensate for the previous decline.

- ***New model***

The growing share of commercial revenues in the clubs' budgets reveals a new strategy of diversifying their services, particularly in the areas of leisure, health and social integration. In addition, clubs are also supplementing their income through the organisation of sporting events such as training courses, tournaments and public events. Finally, it is important to note the importance of the territorial dimension in such a diversification strategy. Clubs located outside the major metropolitan areas seem to develop an economic model that is more focused on activity revenues than metropolitan clubs, which can benefit from higher membership revenues due to the size of the population in their host territories.

Typology of amateur clubs

To establish this typology, CDES carried out multiple correspondence analysis (MCA) on the following variables characterising the clubs: host territory, level of competition, number of members, type and number of federations belonging to, the budget amount, legal status, and number of jobs. Three types of clubs emerged.

- ***Small community clubs***

They represent two-thirds of the sample and are the basis of the French sporting system even if, from a strictly economic point of view, they weigh relatively little in the total revenue (6% of the total). These clubs are small, specialised, and affiliated with a single federation. They have an over-representation of structures that do not take part in any competition and are more in the field of leisure sport. Although these clubs are present throughout France, they are over-represented in small towns.

Almost all of these clubs operate without employment or recourse to external service providers. As a result, the economic model of these clubs is characterised by a small budget, with membership fees constituting the bulk of their revenue. The subsidies received come from the host municipalities. The range of activities is centred on leisure activities and the organisation of a few sporting events. There is no diversification of activities towards health or social integration.

- ***Medium-sized clubs***

This group includes about a third of the sample of sports clubs and accounts for almost half of the total economic weight, mainly due to grants and partnerships. These clubs are of medium size (100 to 500 members) and are specialised in a single federation, usually Olympic. In contrast to the previous group, these clubs are essentially competition-oriented but are similar in that they do not have any sports jobs.

The economic model of these clubs is based on a diversification of activities, which allows them to achieve a relatively balanced distribution of resources between memberships, activities and subsidies. The activities offered concern leisure activities and the organisation of sporting events without any real opening up to new audiences in the health or social sectors.

- **Big clubs**

These clubs may be few in number (3% of the total) but they account for about half of all revenues. They are all large, with an average of about 2,000 members. This explains why these clubs are hosted by large territories. Unlike the other two types of clubs, which are single-sport, this third group includes 70% of multisport clubs. These clubs are predominantly competitive and are employing structures.

The economic model of these clubs is based on large budgets fed primarily by members' subscriptions and shows less dependence on public subsidies. The range of activities is the most comprehensive of the three groups, with leisure activities and sporting events opening up to health products and, to a lesser extent, social integration.

What future for amateur sports clubs?

The previous typology is useful for analysing the ability of clubs to adapt to major societal changes. It has already been established that the sporting practices offered by clubs no longer correspond completely to social demand. Several major trends will shape the future of sport: an ageing population; increasing social and territorial inequalities; global warming with the destruction of ecosystems and biodiversity, etc. A number of scenarios can be envisaged depending on the assumptions made about such developments. Furthermore, the reasons for practising sport are undergoing profound changes, with an increasing lack of interest in competition and performance, and a marked interest in practising sport in relation to health, conviviality and nature.

The adaptation of clubs to such a change in demand in an increasingly uncertain global environment will have to be done in a difficult economic context for associations due to the decrease in public support, the conditions of access to sports infrastructures and increased competition from commercial structures. The future of sports associations depends on their ability to strike a balance between professionalism and volunteerism to strengthen the diversification of their range of activities, which as we have seen, is still in its infancy.

Further information:

CDES, *Diagnostic sur le décalage entre l'offre et la demande de pratique sportive,* Etude pour le Conseil National du Sport (CNS), mars 2016.

CDES, *Le modèle économique des clubs sportifs fédérés. Analyse et pistes de développement*, Etude pour le CNOSF, 2020.

Viviane Tchernonog et Lionel Prouteau, *Le paysage associatif français : mesures et évolution*, 3ème édition, Juriséditions, Dalloz, Paris, 2019.

Related articles: volunteering, club deficit, the sporting exception, the future of sport, club owners, social utility

European professional sporting leagues: institutions at the service of a sporting logic?

The European system, open and liberal [Scelles and Brocard, 2019], is put at the service of a sporting logic and was based, at the end of the 19th century, on a 'Coubertinian' conception demonising the commercial dimension of sport. This is in direct contrast to the North American system, which is closed and mutualist and at the end of the 19th century became profit-oriented. The system was regulated during the 1950s, to restore the clubs' profitability following a serious financial crisis within the main leagues.

Is there a European sporting model?

In Europe, professional sport is based on certain common principles: a pyramidal model of access to competition (sporting merit); the organisation of competition (promotion/relegation); partial cartelisation of leagues (collective negotiation and sale of TV rights); the objective function of clubs (maximisation of sporting gains under budgetary constraints); the legal regime (EU law); the management control of clubs (financial fair play); the intrinsic link with amateur sport (organic); the link with a territory (strong) and the functioning of a production factors market (liberal, tough economic competition). [Bourg and Gouguet, 2012]

The economic model of sport is characterised by the sporting balance or imbalance of the competition, the economic balance or imbalance between its clubs in terms of revenues, the structure of its financing and costs, and by its financial results, deficit or surplus [Andreff, 2017].

In practice, there are real distortions of competition between the national leagues of the various team sports in Europe. These distortions relate to the public or private legal status of clubs, the size of the local market, the volume and structure of turnover, the burden of tax and social security contributions, the ownership of facilities, the ownership of TV rights, the method of selling and distributing TV rights, and the balance or imbalance in national and European competitions.

The weakening of the European sports model

For example, empirical observation and economic analysis of European professional football lead to a model of imbalance in open leagues [Andreff, 2012]. The interdependence of leagues and their lack of homogeneity, within each of them, and with each other, unbalances both national and European competitions, locks in their hierarchy and complicates any desire for regulation [Bourg, 2004].

An indicator of the concentration of victories in the five main leagues (Germany, England, Spain, France, Italy), reflecting the average gap in the standings between the top four and the other clubs, has never been as wide since the creation of the Champions League in 1993 (*see the blog Money Time ecosport.blog.lemonde.fr by Jean-Pascal Gayant, 2018*). The Champions League, meanwhile, is seemingly reserved from the semi-finals onwards for a few teams that accumulate titles and notoriety: Real Madrid, FC Barcelona, Bayern Munich, Liverpool, Manchester City, Juventus Turin, and Paris Saint Germain.

An oligopoly structure, a modern form of imperfect competition, reveals the domination of the European football market by some 15 clubs, which always qualify for the top competition (the Champions League). Annual sporting performance can indeed fluctuate and have a slight impact on their revenues. However, the majority of these clubs' turnover is made up of revenues, which depend directly on the clubs' reputation, their regular presence in the most prestigious competitions and their media and digital exposure (TV rights, sponsorship, and merchandising). Thus, globally and over time, the economic oligopoly coincides with the sports oligopoly [Andreff, 2017].

The dual-level of competition (national/European) gives a considerable economic advantage to the clubs involved in both levels compared to those who play only in the national leagues. The revenues earned by the big clubs from the European cups make the national competitions imbalanced due to their amount. As a result, these clubs have a greater capacity to invest in talent than others do, which allows them to maintain their supremacy.

Towards the creation of a closed European football super league?

All national or supranational leagues, which make the access of clubs to their competitions conditional on criteria other than sporting criteria or without taking into account the sporting results of national competitions, are considered closed leagues. As it stands, European Union law is not intended to protect the traditional model of sport in Europe. Consequently, UEFA is not justified in imposing a sanction on players who have participated in competitions not organised under its aegis. Therefore, the private non-sporting organisation is entitled to create a supranational closed league in Europe.

A microeconomic analysis, with game theory in a non-cooperative game, shows the reasons and consequences of a possible split between the existing federal sporting movement and a private Super League [Rocaboy, 2017]. The superposition of national and continental competitions underlies two, a priori, contradictory objectives for the leagues: to privilege the competitive balance of the national championship by adopting an egalitarian distribution of TV rights or, on the contrary, to adopt an unequal sharing to the benefit of the best national league teams in order for them to perform in the Champions League.

Furthermore, the growing financial and sporting dominance of one of the five major leagues (the Premier League) is encouraging the emergence of a Super League, as the dominated leagues no longer wish to suffer this imbalance within the current Champions League set-up and wish to reformat the European competition to gain access to greater and more stable revenues.

The European Club Association (ECA) has devised a Super League project to put pressure on UEFA to increase the redistribution of TV rights by the owner of the Champions League. The argument of this lobby is as follows. The world's TV stations pay 3.6 billion euros a year for English football's Premier League and 7 to 8 billion euros a year for the American football championship. So how much would they be willing to pay - including web and digital platforms, Western GAFAMs and Chinese BATXs - for the broadcasting of matches in a globalised Super League of the twenty best European teams? [Arrondel and Duhautois, 2018].

To avoid the constant threat of splitting up the main clubs, UEFA regularly modifies the terms of access to the Champions League in their favour (more direct qualifying places for the four best nations in the UEFA index, i.e., England, Spain, Germany, Italy), as well as the criteria for the distribution of TV rights: increase in the share reserved for clubs belonging to the major markets, i.e., the same as above (a new reform based on this idea will be implemented from 2024).

It is true that even without the Super League; the big clubs have established their economic dominance sustainably while complying with UEFA's qualification rules. However, they are in favour of creating a closed league that would institutionally lock in their advantages once and for all. It is also true that these European clubs, which are increasingly owned by owners and investment funds motivated by maximising financial gains, are primarily interested in increasing and securing their profits.

However, with a closed league, it is possible to set up several regulatory instruments (salary cap, rookie draft, luxury tax) which allow the containment of the salary costs and ensure capture of the income by the clubs to the detriment of the players who appropriated it in the post-Bosman era. Moreover, this proposal for a closed league would have several disadvantages: the disappearance of the "glorious uncertainty of sport"; a total alignment of the organisation of this competition with the values of the market; a loss of attractiveness and sporting and economic impoverishment of the national championships; a break in the pyramidal and unitary organisation of amateur and professional team sport; the weakening of the academy system based on the opening up of competitions and internalising training and the retention of these teams' best talents for the national league games.

The European sports system is weakened by the heterogeneity of its economic models and by the actual or potential development of closed leagues: basketball, ice hockey, swimming, speed skating, football, etc. [Anglade and Bastien, 2019]. However, the transposition of the North American closed league model to Europe would challenge the history and culture of European sport by considering sport as a mere means to the service of profit maximisation, with sport being considered simply as a market. Moreover, the North American experience shows that the arguments traditionally put forward by the supporters of closed leagues (sports equity, financial stability, attractiveness of the competition) are not confirmed [Lavoie, 2004].

All these reasons explain the failure of the new private and closed Super League project, composed of 20 pre-selected European clubs without qualifying stages and owners and shareholders of the competition supported by the American bank JP Morgan. The pressure of the fans (final consumers of the 'product') hostile to the disappearance of the founding principles of continental sport (qualification and uncertainty of the outcome) led the promoters of this initiative to withdraw it two days after its announcement in April 2021.

Further information:

Wladimir Andreff, « Le modèle économique du football européen », *Pôle Sud, Revue de science politique de l'Europe méridionale,* n°47 (2), 2017.

Wladimir Andreff, *Mondialisation économique du sport*, De Boeck, Bruxelles, 2012.

Marie Anglade et Jérémie Bastien, « Ligues fermées en Europe : menace ou opportunité ? », *Jurisport*, n° 201, octobre 2019.

Luc Arrondel et Richard Duhautois, *L'Argent du football*, CEPREMAP, Paris, 2018.

Jean-François Bourg, « Les sports collectifs professionnels en Europe : quel modèle économique ? », dans Jean-Jacques Gouguet (dir), *Le sport professionnel après l'arrêt Bosman : une analyse économique internationale*, PULIM, AIES-IASE, Limoges, 2004.

Jean-François Bourg et Jean-Jacques Gouguet, *Economie du sport*, Repères, 3ème édition, La Découverte, Paris, 2012.

Marc LAVOIE, « Faut-il transposer à l'Europe les instruments de régulation du sport professionnel nord-américain ? », dans Jean-Jacques Gouguet (dir), *Le sport professionnel après l'arrêt Bosman : une analyse économique internationale*, PULIM, AIES-IASE, Limoges, 2004.

Yvon ROCABOY, "Competition Among National Football Leagues. Does it Exist? Should we Regulate?" *Scottish Journal of Political Economy*, vol 64, issue 1, 2017.

Nicolas SCELLES and Jean-François BROCARD, "European Sports Leagues: Origins and Features", in Paul Downward, Bend Frick, Brad R. Humphreys, Tim Pawlowski, Jane E. Ruseski and Brian P. Soebbing (eds), *The SAGE Handbook of Sports Economics*, Sage, London, 2019.

Related articles: Bosman ruling, club deficit, competitive balance, financial fair play, North American professional sports leagues, luxury tax, regulation, rookie draft, salary cap.

North American professional sports leagues: institutions at the service of a financial logic?

From the end of the 19th century onwards, sport was professionalised in the United States, and, under pressure from club owners became an essentially commercial activity with the sole objective of maximising profit. Nevertheless, beyond the spectacle, sporting values are put at the service of the promotion of the liberal economic model, and sport in general will hold a very important place in American society and its educational system. However, it is in this context of a liberal economy that, paradoxically, a highly regulated system of organisation of professional sport will emerge. This American model is structured around a few major leagues organised into cartels governing competitions: MLB, NFL, NBA, NHL, and MSL.

An original model

- ***History***

The major leagues were created at the end of the 19th century with the industrial and urban development of the United States. From a sporting point of view, the English influence was felt at the beginning but, from an organisational point of view, the establishment of the major leagues allowed the specificity of the American model to be affirmed, and baseball is the best example of this.

Baseball was initially structured around a national players' association that promoted their interests by allowing them the freedom to change clubs and go to work for the highest bidder. The creation of the National League in 1876 shifted power to the club owners, who succeeded in imposing the famous "reserve clause" in 1880. This clause put an end to the free movement of players from one club to another by making mobility subject to the agreement of the departing club, which led to the creation of the first professional players' union in 1885. This helps us to understand the type of collective bargaining that was to be set up between club owners and players' unions to decide on the sharing of income from the sporting spectacle. In the 20th century, this system became more complex with the success of the major leagues, which became economic and financial stakes for multiple stakeholders: owners, players, unions, agents, public authorities, lawyers, etc.

- ***Closed leagues***

Participation in the competition is based on the purchase of a franchise by an owner and the signing of a contract with the league. All the leagues function in this way in a completely independent manner and without any link with the lower divisions, the national and international federations or the amateur world. We are in an organisation with an economic purpose (profit maximisation) that is not based, as in Europe, on sports results since there is no mechanism of promotion/relegation to decide who remains within the elite. The economic security of closed leagues to attract investors has given rise to very strict regulations in the service of competitive balance and negotiation between all the stakeholders.

- ***Collective bargaining***

The functioning of the league was for a period of four to ten years based on the signing of a collective agreement at the end of the negotiation between all actors. This has always been a decisive moment in the history of American leagues, which is studded with strikes and lockouts. It is indeed a question of deciding collectively on the sharing of the league's revenues between the players and the owners; between the league and the clubs; between the clubs and between the players. This negotiation takes place around the regulatory instruments of the labour market (salary cap, rookie draft, etc.) to try to reach an acceptable compromise between competitive balance and fair distribution of revenue.

- ***Geographical mobility***

The geographical mobility of franchises is possible but highly regulated. There is a very strong opposition between those in favour of and those against mobility, depending on whether one favours economic or sporting logic. In the former, the optimal location of clubs is based on the best profit opportunities, mainly due to the size of the markets. In the latter, respect for the fans and the host territories imposes a limit on mobility. The main consequence of such a conflict of logic is the blackmail of relocation used by owners to obtain subsidies for the renovation or construction of new stadia. The search for the optimal location of a franchise from an ecological point of view is not always in harmony with sporting ethics.

Competitive balance

The American leagues have set up instruments that benefit from an exemption from anti-trust laws in the name of improving the competitive balance and consequently the well-being of the population.

- ***Income redistribution***

To compensate for the imbalance between large and small markets, it is sufficient to redistribute the income from the sporting spectacle. In this way, the concentration of sporting talent in the hands of the richest actors can be avoided. Different leagues have different ways of redistributing the main revenues (television broadcasting rights, ticket sales, stadium revenues), with a clear distinction between national and local revenues. The NFL has historically been the most financially supportive league and, despite this, is the one that generates the largest revenues and is the most profitable.

- ***Salary cap***

This is the league's overall player salary cap, which is established through collective bargaining. It allows the cap to be defined at the level of each club, thus preventing the richest clubs from acquiring all the best players on the market. Nevertheless, many adjustments and exemptions to these caps exist depending on the league (hard or soft salary cap, luxury tax).

- ***Talent allowance***

Although the reserve clause limiting player mobility was abolished in 1976, restrictions still exist depending on whether a player is a free agent or not. For new entrants (from universities, minor leagues or foreign leagues), the American leagues have invented the rookie draft system: each club's choice from the list of players is made in reverse order of the previous season's league ranking. The last club can therefore choose the best - or reputedly the best - player first. Some adjustments have been made to this rule to avoid opportunistic behaviour from low ranking clubs.

In the end, two central questions fuel a debate amongst sports economists: is this regulation of American leagues effective? Can this regulation be transferred to European leagues? Beyond the technical answers given, we must above all ask ourselves if the American model of closed leagues is well adapted to European culture. The simple fact remains that completely cancelling sporting uncertainty changes the spirit of competition.

Further information:

Wladimir Andreff et Stefan Szymanski (eds), *Handbook on the Economics of sport*, Edward Elgar, Cheltenham, 2006.

Jean-François Bourg et Jean-Jacques Gouguet, *Economie du sport*, Repères, La Découverte, Paris. 2012.

Jean-Jacques Gouguet (Dir.), *Le sport professionnel après l'Arrêt Bosman. Une analyse économique internationale*, Pulim, Limoges, 2005.

Didier Primault, « Ligues professionnelles. L'exemple américain », *Jurisport,* n°119, Avril, Dalloz, Paris, 2012.

Related articles: competitive balance, sporting exception, luxury cap, rookie draft, salary cap.

CHAPTER II: THE FINANCING OF PROFESSIONAL SPORT

Professional sport underwent a revolution in its financing in the 1990s with new sources of revenue replacing others. If we take the example of football, we have seen a decrease in gate receipts and public subsidies and a considerable increase in television broadcasting rights, as well as funds from billionaires, the stock market, merchandising and player trading. Thus, there is a risk that sport will succumb to the interests of actors outside the sporting sphere who are not inclined to respect sporting values, and this has led to numerous abuses.

Stock market listing: a development lever for sports clubs?

Definition and state of play

Access to the stock market results in the issuance of shares, i.e., ownership titles in a company that can lead to the distribution of dividends. By mobilising international savings where they are available and in excess, and by making them available where they are needed, the financial markets provide professional sport with new resources to finance development projects: 189 million euros were raised during the IPO of Manchester United in 2012, 105 million for Juventus Turin in 2001, 102 million for Borussia Dortmund in 2000 and 89 million for Olympique de Lyon in 2007.

About 50 clubs have been listed on the stock market globally. This is a very small proportion compared to the number of clubs (5% in Europe). From 1983 onwards, only European football has aroused any real interest, with some 40 clubs listed in 11 countries: Great Britain (24 clubs), Denmark (6), Turkey (4), Portugal (3), Italy (3), Germany, France, the Netherlands, Poland and Sweden (1). Outside of Europe, very few clubs are listed: a few franchises in the major North American basketball, baseball and ice hockey leagues, and a small number of football clubs in South America, Africa and South-East Asia. A stock market listing is not necessarily synonymous with sporting performance. Amongst the 20 or so football clubs listed in the early 2020s are some top teams (Manchester United, Juventus, Borussia Dortmund) and others of modest standing (Aalborg BK, Ruch Chorzow, Brondby IFB). Similarly, the market capitalisations of the clubs vary widely, from 2 million euros for Chorzow to more than 3 billion euros for Manchester United (July 2020).

The stock market can be an advantage for clubs: a lever for the development of their real estate investments (stadia), a reinforcement of their equity to recruit players, a diversification of the shareholder base, additional liquidity for previous shareholders, a reduction of their debt, an obligation of rigorous management, planning and transparency and the association of fans with the financial life of the club.

During the 1990s, a stock market bubble formed in European football. However, since it burst in 1997, it has not reappeared. On the contrary, from the 2000s onwards, few clubs were priced above their introductory level; from the 2010s onwards few new listings were made; and by the early 2020s, half of the listed clubs are no longer listed. An empirical study of the detailed Dow Jones Stoxx Football index shows high volatility of returns and share prices, as well as weak market depth [Aglietta, Andreff and Drut, 2008].

Uncertainties and risks of listing

The peculiarities of the spectacle of high-level sport allow us to better understand the erratic relationship between listed clubs and financial markets. There is a fundamental contradiction between the stock market, which does not appreciate uncertainty, and sport, whose entertainment value is created mainly by the glorious uncertainty of the result. Moreover, investors doubt the ability of clubs to create value in the long term. There is also a risk that the value will be captured by the players and their agents, and not by those who take the financial risks (the shareholders). In addition, the allocation of resources is oriented, in most cases, towards sporting issues to the detriment of a commercial diversification strategy. Lastly, the markets are fearful of poor financial management by the clubs, with a lack of control over the wage bill and recurring deficits.

The fundamental value of a club is not easy to determine. The assets of clubs are mainly, and sometimes almost exclusively, intangible assets such as the players. These intangible assets are characterised by high variability and, above all, the speed at which they can depreciate for a variety of reasons: injuries, poor form, psychological difficulties, and poor integration. The high variability of these assets is not covered by sufficient equity.

Research based on event studies shows that three sets of elements cause financial markets to react and are a source of variability in the fundamental value of clubs: sporting results, value creation and its distribution to shareholders, and players' wage-bill management.

Sports results and stock market volatility of clubs

The ex-ante evaluation of the future performance of a professional football team is delicate. It is difficult to predict the individual or the collective performance of the players, in other words, the transition from individual to collective talent, including poor refereeing decisions or simple bad luck. The players' wage bill accounts for the majority of a club's operating costs due to the continuous increase in remuneration. However, the turnover depends on the team's sporting results.

Sports results contain important information for investors who revise their portfolios after matches [Benkraien, Le Roy, Louchichi, 2012]. Thus, on average, for English clubs listed on the stock exchange including during the 2000s, we note a significantly positive impact of victories on the club's share price (+ 0.88% over the three days following the match) and a significantly negative impact of defeats (- 1.01% over the three days following the match) [Palomino, Remeboog and Zhang, 2009].

The share price reacts more intensely at the end of the season because the last matches are decisive for the club's sporting future: European Cup qualification or league survival, promotion or relegation. These matches provide more information about the club's end-of-season revenues (TV rights share) and the projected revenues for the following season. Only the club's sporting results can remove the uncertainty and provide the investor with information.

If a club is eliminated from the Champions League, its stock market price will fall significantly due to the financial stakes involved in qualifying for the finals (several tens of millions of euros). For example, the two successive eliminations of Juventus Turin in the last 16 of the Champions League in 2020 and 2021 resulted in a drop in the value of Juventus' shares the day after each match:
-10% on 9 August 2020, -8% on 9 March 2021.

Value creation, dividend distribution, player and payroll management

The price of football clubs seems to react more extensively to financial information - (balance sheets, commercial contracts, structural investments), human resource management (mainly superstars and coaches) or changes in the competition formula that reduce the sporting risk - rather than the evolution of sporting results [Gimet and Montchaud, 2016].

The example of Juventus Turin's share price fluctuations over two decades illustrates the diversity of stock market movements depending on the nature of the information received. From the 2000s onwards, Juventus' share price collapsed from €3.70 in 2001 to €0.20 in 2016 due to major dysfunctions: failing governance (doping, corruption), sporting and economic risk, (as in 2006, when relegated to the second division and a 50% drop in revenue as a result of fraud), and infrastructure obsolescence.

In the late 2010s, however, the club's share price recovered significantly, although it did not return to its initial price – from 0.2 euros in 2016 to 1 euro in 2020. The stock market has appreciated Juventus' new business model, which aims to turn the club into a global entertainment company with the construction and ownership of a modern stadium, the recruitment of Cristiano Ronaldo, successive league victories, lucrative participation in the Champions League finals, profitable operating results, and the distribution of dividends to shareholders.

The arrival of the Portuguese superstar was therefore seen as an indicator confirming this ambition: the share price rose by 20% in the four days following the announcement of the player's signature on 10 July 2018. It is evident that, beyond his sporting contribution, Ronaldo, with his image of a global superstar (more than 300 million subscribers on Western social networks), constitutes a strategic source of additional revenue for Juventus: +60% of sponsorship, +120% of the contract with Adidas, tripling of sales of the club's football shirts.

One way to reduce, or even hide, the impact of sporting results on stock market prices is to strongly diversify the club's economic activities and revenue structure [Bancel, Belgodère and Philippe, 2018]. By capitalising on its brand, Manchester United sees its share value as that of a company much more than that of a football team. Its poor sporting results in the late 2010s did not lead to a stock market crash. With 650 million fans worldwide and omnipresence on social networks, the Manchester United brand is so valuable that its commercial partners sign up for long-term contracts without worrying about short-term sporting contingencies.

The prospects for long-term value creation for certain clubs and the football industry linked to the announcement of the creation of a private, closed Super Champions League was greeted on the 18th of April 2021 by the Milan Stock Exchange with a 7% rise in the share price of Juventus Turin (a founding member of this ultimately postponed project).

Some academic studies question the value of listing sports clubs on the stock market [Aglietta, Andreff and Drut, 2008]. A chronic stock market underperformance of clubs has been observed in comparison with other stock market indices and even with obligatory indices. This is despite the fact that the extreme risks are higher for the clubs with very erratic prices over certain periods. The importance of intangible capital (the value of players) and the difficulty of its valuation by investors, as well as the uncertainty of the sporting result, make the professional sports industry vulnerable to the financial markets.

Furthermore, a listing does not significantly improve sporting results and, with the exception of Manchester United and Juventus, all the other major European clubs are not listed (Barcelona, Real Madrid, Bayern Munich, Manchester City, Liverpool, and PSG). Club owners now prefer to look for revenue from player sales, TV rights or merchandising, rather than raising money on the stock market.

Further information:

Michel Aglietta, Wladimir Andreff et Bastien Drut, « Bourse et Football », *Revue d'Economie Politique*, vol 118, n° 2, mars-avril 2008.

Franck Bancel, Bruno Belgodère et Henri Philippe, *Créer de la valeur dans le football. Comment évaluer les clubs et leurs actifs*, RB Edition, Paris, 2018.

Ramzi Benkraiem, Frédéric Le Roy et Waël Louhichi, « Football et Bourse : analyse de la volatilité autour des annonces de résultats », *Recherches en sciences de gestion*, vol 4, n°91, 2012.

Céline GIMET et Sandra MONTCHAUD, "What Drives European Football Clubs' Stock Returns and Volatility ?", *International of the Economics of Business*, vol.23, Issue 3, 2016.

Frederic PALOMINO, Luc RENNEBOOG et Chendi ZHANG, "Information salience, investor sentiment, and stock returns: the case of British soccer betting", *Journal of Corporate Finance*, vol. 15, n° 3, 2009.

Related articles: sporting venues, club owners, superstars

Club deficits: structural financial instability?

History

The structural deficit of professional football clubs in Europe has given rise to extensive economic literature on the nature and origins of the financial crisis that has affected the sector since the late 1990s. All European clubs have seen their accounts deteriorate and the causes put forward by the economic analyses include both internal causes within the football sector and external causes linked to the economic crises of 2001 and 2008.

- ***Internal causes: the wage relationship***

The wage relationship in the European professional football sector has developed in a very specific way from the 1990s onwards. Players and their agents have managed to gain considerable bargaining power with the clubs in terms of sharing the added value. This makes it possible to understand that clubs have been forced to devote most of their income to player salaries and transfers. Such sharing in favour of employees is in stark contrast to other sectors of the economy where it is in favour of shareholders.

This increase in the cost of footballers in Europe has given rise to the hold-up theory, which is part of the general contract theory of the New Institutionalism. Players are the basis for the sporting success of clubs, which in turn is the source of their main revenues (ticketing, broadcasting rights, sponsorship, merchandising). This is particularly true for superstars. Under these conditions, the loss of a player can lead to considerable financial losses for the club. This is why elite-players can force their clubs to renegotiate the terms of their contract, including a substantial increase in their remuneration, blackmailing them by threatening to leave. There are two outcomes to this confrontation: either the club decides to keep the player with a salary increase that makes the hold-up a reality or the player leaves his club for another that accepts his conditions. Clubs have generally reacted by increasing the length of contracts to avoid player movement and increasing the sale price during the transfer to try to discourage competing clubs.

When you add up all these factors, you can see why European professional football is in financial crisis, with the cost of wages and transfers rising dramatically. It was the Bosman ruling that accelerated this inflation. By liberalising the labour market, this ruling sped up the clubs' 'arms race', as well as their over-indebtedness created by financing this purchasing of sporting talent. When sporting outcomes are not forthcoming, this results in difficult financial situations, especially for small clubs, when there is no last resort payer.

- ***External causes: economic crises***

Clubs' financial difficulties can also arise from causes outside the football world. In particular, the football sector can be affected by global economic and financial crises such as the 2001 crisis (new economy) or the 2008 crisis (subprime). Sports economists have therefore sought to analyse the channels through which such global crises can be transmitted to the football sector by affecting the stakeholders who provide its financing:

- Owners may be weakened by the crisis in their industry and be forced to reduce their contribution to the club or even sell it.
- Households may suffer a loss of purchasing power as a result of unemployment due to the crisis and cut back on expenditure that is considered non-essential.
- Sponsors affected by the crisis in their sector of activity are also condemned to reduce their spending on sports partnerships or even cancel them completely in the event of bankruptcy.
- In times of crisis, television stations may experience a loss of revenue because advertisers do not buy advertising space. However, this impact is limited thanks to the multi-annual nature of the contracts linking the broadcast media to the clubs. It is therefore, in the case of the bankruptcy of broadcasting groups or serious financial difficulties that the repercussions on clubs are most painfully felt.
- Public administrations that see their budget deficits widen in times of crisis generally reconsider their support of professional football clubs, which often takes the form of participation in the financing of infrastructures, the reduction of rent charges, the provision of personnel, or the lifting of the requirement to pay tax arrears. This is all the more necessary as this type of expenditure can be politically dangerous in times of crises when more urgent social needs are at stake.

Whatever the causes of the clubs' deficits, the question is why such deficits, the main causes of which have just been described, have not been remedied and why, in the long term, they risk undermining the entire structure of European professional football.

Elements of analysis

- ***Deregulation***

The neo-liberal policies introduced in the 1980s did not spare the football world. In particular, the labour market for professional players was made more mobile by the Bosman ruling, which led to an increase in the wage bill and transfer expenses, resulting in chronic deficits for clubs. In the face of these deficits, the national and European regulatory arsenal for controlling club finances has not been up to the task. This is why UEFA decided to strengthen the methods of budgetary control of clubs with the introduction of the club licence in 2004 and then of financial fair play in 2012. These regulations only really concern the clubs that want to participate in European competitions, i.e., a minority. Moreover, there are many strategies for circumventing these regulations, which explains their relative ineffectiveness. In particular, the biggest clubs are rarely punished to the extent of their accounting manipulations.

Furthermore, European football is characterised by a great deal of heterogeneity in its sporting regulations, which contributes to the inefficiency of the whole. This heterogeneity concerns the mechanisms for controlling the management of clubs, their legal status, the regulation of broadcasting rights, fiscal rules, labour regulations and the control of players' agents. Under such conditions, it is very difficult to devise common rules to serve the financial balance of clubs.

- ***Soft budget constraint***

Owners are willing to cover the chronic deficits of their clubs as long as their objective is not profit maximisation. There are other motives for owning a football club that is not necessarily economically motivated. The biggest clubs owned by sugar daddies can benefit from real financial doping aimed at maximising sporting performance. Economists refer to this situation as soft budget constraint, as opposed to hard budget constraint that is the rule in the mainstream sectors of the economy. This soft budget constraint does not encourage club managers to tighten their budgets, especially since in football culture it is accepted that there will always be a last resort payer. If it is not the owner it will be, for example, the public authorities who may decide that the club is 'too big to fail' and must therefore be saved from bankruptcy.

In conclusion, European professional football is characterised by high financial instability due to multiple internal and external factors. The question is whether a systemic crisis is conceivable or whether the soft budget constraint will always be sufficient. The fear of such a crisis has prompted the European football authorities to propose regulatory instruments for the budgetary control of clubs, which have helped to limit the growth of their financial imbalances. Nevertheless, a certain number of big club managers would like to see the financial insecurity resulting from the operating rules of an open league reduced. It would therefore be by implementing a closed league in Europe that effective budgetary control instruments could be introduced, as is the case in the major leagues in the United States. Here again, the bargaining power of the big clubs is quite considerable. The arms race for maximum sporting success has deepened the segmentation of European football to such an extent that the European club competition appears to be a quasi-closed league: it is always the same clubs that return from one year to the next and share the bulk of the Champions League revenue. It is therefore interesting to ask whether the blackmail carried out by the big clubs towards the European football authorities is a real request for closure or simply a strategy to continue to benefit from a certain regulatory laxity that allows them to perpetuate a quasi-closed league.

Further information:

Wladimir Andreff, *An Economic Roadmap to the Dark Side of the Sport*, Palgrave Mac Millan, 2019.

Jérémie Bastien, *Le football professionnel européen dans un système capitaliste financiarisé en crise : une approche régulationniste des facteurs de changement institutionnel*, Thèse de sciences économiques, Université de Reims Champagne-Ardennes, 2017.

Jérémie Bastien, « Le football professionnel en Europe est-il en crise ? Une réponse régulationniste », *Revue de la régulation*, 21, printemps 2017.

Yann Carin : *La faillite des clubs français de football : un secteur spécifique*, Thèse de sciences économiques, Université de Limoges, 2019.

Related articles: Bosman ruling, sporting exception, financial fair play, European professional sporting leagues, North American professional sports leagues, club owners, regulation, segmentation, superstars.

Sports stadia (The Mega ones): what legitimacy for public funding?

From the ancient stadium to the connected stadium

Whatever their purpose (competition, education, leisure, practice, entertainment), sports venues (stadia, arenas, specialised or multi-purpose sites, public or private, free or paid access) have been undergoing an unprecedented dynamic of construction, modernisation and upgrading throughout the world since the end of the 20th century. Indeed, the dilapidated state of the facilities, their monofunctionality, their unsuitability to the new expectations of the population, as well as the requirements of high-level sport explain the extent and intensity of these investment programmes. This is the sixth generation of stadia:

1. Ancient stadia (straight track and stands);
2. 19th century Stadia up until the 1920s (amphitheatre model);
3. Stadia that were symbols of power until the 1950s (very large, bowl-shaped and surrounded by a cycling track);
4. Stadia incorporating technological developments in materials and adapted to democratisation by television (no cycling or athletics track, rectangular stands and all covered);
5. Stadia designed to ensure the safety of the public after the tragedies of the 1980s and 1990s (Heysel in Brussels, Furiani in Bastia), to improve the media coverage of competitions, with the emergence of multifunctionality and multi-activity (retractable roof, boxes, etc.);
6. Functional, multifunctional, multi-activity and connected stadia at the beginning of the 21st century, with an architectural approach that reflects the identity of a territory, a sustainable development dimension, optimal comfort, a customer path, a public relations venue, etc. (business seats, VIP areas.) [Andreff, 2012].

The general economics of sporting venues

A sports facility is always underused. If it is solely dedicated to practicing, then there is always an imbalance between the number of services offered and the volume of demand for these same services because it is impossible, for obvious reasons, to operate a facility twenty-four hours a day, every day of the year. If it is a venue offering entertainment as well, then it is in excess of its services for a large part of the year barring matchdays (about fifty per season on average) and even on matchdays, since the occupancy rate of the stadium or hall fluctuates, depending on the championship and the discipline, of between 40 and 100%. On the other hand, sometimes the venue capacity may be insufficient, particularly during major events in the calendar.

The construction of a new stadium devoted solely to sporting events is rarely profitable. This is why only sports diversification (several resident clubs as in North America) and extra-sports activities (concerts, trade fairs, conventions, etc.) can reduce the deficit. In addition, if there were no public funding, the decision to build would not be taken by the private sector.

The recurrent impact of a mega-stadium on local public finances is to increase their deficit, which is amplified if, beyond the construction cost, the public authority assumes its operating and maintenance cost yet does not receive any income from its operation or if the authority grants the resident club or temporary occupier of the public domain a tax exemption.

In all these cases, there is a transfer of income from taxpayers to club owners and event organisers, as well as to professional athletes through local taxation. Residents who are not fans, spectators, nor interested in sport, are taxed to improve the finances of the shareholders of the companies concerned as well as the players and the clubs' supporters.

A new concept: sports entertainment

The operation of a sports stadium is becoming a growing concern in the economic strategy of professional clubs, even if the considerable increase in TV rights may have led people to believe for a while that, in certain sports (football for example), the spectator's contribution was marginal and secondary [Bourg and Gouguet, 2017]. Therefore, these new stadia must be communal areas where people not only meet on matchdays but also benefit from them on other occasions. This is why their modernisation requires the transformation of the stadium or hall into comfortable, safe, interactive, federative and profitable spaces, integrating various forms of entertainment or activities.

These investments must correspond to real urban projects, bringing together a housing estate complex, a shopping centre, a sporting and cultural spectacle business, hotels and restaurants. It is advisable to focus on sports entertainment and to develop the 'business centre' concept, with modular equipment to attract companies (meetings, conferences, seminars, offices, catering, accommodation, etc.).

This strategy has already been implemented in the United States, England and Germany. Of course, this model is only envisaged in large metropolitan areas with a hinterland, in terms of population-level and the size of the public and private partners, who can bear both the investment and operating costs of an elite club and this type of stadium. A new facility is expected to increase the average attendance by 30-40% on a sustainable basis. The conditions for the profitability of the stadium are based on multifunctionalism, gentrification and the organisation of at least 120 to 150 events per year, one-third of which are sporting events.

Public funding of dedicated professional sports facilities: the reasons

How can it be said that a mega-sports stadium is in the public interest? How can we determine that such an allocation of public funds would not be more socially profitable in another sector (education, health, environment, etc.)? [Gouguet, 2011]. Several lessons can be drawn from the public funding of North American arenas. Indeed, the professional teams in the five main leagues (MLB, MLS, NBA, NFL, NHL) have been receiving increasing public subsidies for the development of their facilities for about sixty years. More than 80% of them have benefited from public funds, which have represented more than three-quarters of their overall cost.

There are several reasons for the increase in public funding and the increase in the pace of construction over the last three decades. For the franchises (clubs), the revenues from the operation of the stadium are vital because they are not shared equally like TV and commercial rights. Moreover, a change of venue systematically allows clubs to renew their audience and increase their revenues by attracting a more affluent and higher spending clientele in addition to increasing the ticket price.

Two peculiarities of the North American model give considerable lobbying power to franchise owners over local public authorities. First, the producers of the sporting spectacle (the clubs) function as unregulated monopolies in the territory in which they operate, as do the leagues, which hold an unregulated monopoly on the supply of their discipline, both of which are exempt from anti-trust laws. In addition, with the geographical mobility of franchises (the operating licence is not legally attached to a city, but an owner), the clubs may, with the approval of the league, seek the most profitable conditions by moving to another city, county or state.

Competitive bidding between cities to host a professional team, with the threat of losing economic and media returns is often an effective way to pressure elected officials to obtain public funding and tax exemptions [Coates, 2019]. There is always one city that will outbid the others, without knowing the exact value of what the club will bring to the city. The city that wins is the one that overvalues the benefits the most.

Many large cities, faced with the dilemma of losing their team or building a new stadium, take the latter option. The leagues' imperative is to accelerate the upgrading of facilities, on the one side, to maintain or increase the percentage of spectator entertainment spending captured by their clubs, and on the other to mitigate the opposition of the richest clubs to the system of egalitarian pooling of the revenues they redistribute. The leagues' monopoly allows them to choose both the number of franchises and where they play. This strategy creates excess demand from cities by rationing supply. This strengthens the bargaining power of franchise owners over local officials who fear team relocation.

The justifications for public funding: economic *vs.* political legitimacy

Two categories of arguments are frequently put forward: modernising stadiums would allow clubs to develop their revenues and be less dependent on subsidies; the economic impact of these new stadia for the territories concerned would become significant, or even compensate for the public investment. A positive correlation has been established between the level of public subsidies and the evolution of the wage bill, as the increase in team resources is fully absorbed by the increase in salaries that it immediately generates. Frankly, the ratio of coverage of expenses by revenues has not improved at all and public support is more essential than ever [Baade, 2005].

With regard to calculating the economic impact of mega-sports facilities, econometric tests in North America to see if there is a link between sales, value-added, employment and the presence of a franchise and a stadium on a given territory are very disappointing. The economic benefits for the local area are minimal, spending by non-local spectators is derisory and there is no cumulative effect of increased activity. The media impact is real, but difficult to quantify.

New venues simply redirect people's entertainment spending, as three examples illustrate. By building stadia with shops, cities direct consumers to them, which enriches the clubs at the expense of other shops in the city (substitution effect). By suspending their leagues for long periods due to owners' lock-outs or players' strikes, the leagues have not caused any decrease in the level of business in the cities concerned, but a simple transfer of spending to the cinema, the theatre, restaurants, etc. (substitution effect). By paying very high salaries to their players, the clubs contribute to exporting part of the region's wealth, since most of this income is not spent locally (leakage effect).

At the crossroads of economics and political science, another origin of the power of sporting authorities over public authorities is the rational actor model [Fort, 2011]. According to this approach, the benefits tend to be captured by the most powerful lobbies, while the costs are borne by those who have no power because they are unorganised. As a monopolist in the local and regional market for baseball, basketball, American football, soccer, or ice hockey, the franchise will capture additional revenues through its dominance in the market. In other words, this market failure allows this redistribution of wealth to the benefit of the sports actors (leagues, franchises, athletes), and of the actors belonging to the sports business industry (construction companies, shops located in the stadium, television channels, sponsors, sports agents, etc.), to the detriment of public authorities, taxpayers and spectators.

Public aid is not justified by economic factors. The decision is based on societal and political criteria: pride in belonging to the same community, social mix, social cohesion, encouragement of sporting activities, and reputation of the city. There are external effects generated by the resident clubs in terms of social utility: the value of the events co-produced by the teams for the supporters (use value) and the inhabitants (non-use value). In addition, local elected officials consider that a new stadium is a very positive element in the balance sheet of their mandate. No elected official wants to appear as the one who has lost the city's professional team, nor risk losing the next election over it.

The legitimacy of new venues can be seen through two questions:

1. What can a mega-stadium bring in terms of economic impact to a territory?
2. What other investments are a department or region ready to renounce to have a larger stadium? [Gouguet, 2011].

The answer to these two questions implies making an enlarged economic calculation, which in reality is extremely rare [Gouguet, 2011].

Oversized and expensive public policies: the case of France

In terms of mega-stadia, the public authorities have sometimes made questionable choices: costly and inefficient legal arrangements (the public-private partnership contracts for the Euro 2016 football stadiums stigmatised by the regional audit chambers), economic inconsistency (oversizing the capacity of the stadia by around 20 to 40%), underestimation of the sporting risk for the resident club (irregular presence at the highest national and European levels), failure to take into account the financial risk (consequences of sorting uncertainty). The cost of these bad practices is socialised, with the taxpayer compensating for the inconsistency of public decisions, the lack of spectators and the failure of shareholders. [Bourg and Gouguet].

Since the 2010s, unprecedented investments (more than ten billion euros) have been devoted to the development or renovation of numerous facilities to meet the specifications of several mega-events hosted by France: Euro 2015 basketball, Euro 2016 football, 2017 World Handball Championship, 2023 World Rugby Championship, and 2024 Summer Olympics.

The public contribution required for Euro 2016 (1.8 billion euros) represents a significant expense for an exceptional but non-recurring event, with a very high concentration of budgetary resources on a very small number of ultra-sophisticated facilities (four new stadia, six upgraded stadia), and only dedicated to hosting a few Euro matches and certain Ligue 1 clubs. Similarly, how the stadia are operated by UEFA during the event, via an ad hoc commercial company (and then during the French championship by SASPs) reflects a situation of socialisation of costs and privatisation of profits. Almost all the costs of the Euros were borne by taxpayers. On the other hand, 95% of the commercial revenues and profits of the event (€830 million out of a turnover of €1.93 billion) were collected by UEFA.

Additionally, the ‘Euro 2016’ effect and the ‘new stadia’ effect, with quantitatively and qualitatively better standards, should have led to a sustainable increase in public attendance. This was not the case. Before and after the opening of these stadia, the average number of spectators per match remains between 21,000 and 23,000 and the occupancy rate fluctuates between 70 and 75%. The structural nature of the handicaps of French football should have encouraged the public decision-makers to be more measured in the calibration of these venues in relation to the real needs of the clubs.

As a corollary, the objective of the new football stadium development programme was to enable a change in the revenue models of French clubs, and in parallel, a reduction in the public subsidies paid to them. The ex-post economic results did not match the ex-ante objectives. The final impact of these investments underlines the lack of relevance of such a public policy and the lack of efficiency in the use of the 'stadium' resource [Moulard,2018].

In effect, the fundamental problem posed by the French Ligue 1 is that of the relevant market for its clubs, which in theory have far fewer opportunities to fill their stadia than their foreign competitors. This is because the capacity of French stadia is overestimated concerning the number of inhabitants of the urban areas, and of the clubs' hinterlands (20 potential customers per seat in France, more than 30 in Germany). The low density of French elite clubs in very large cities (only one club in Paris, 60% of clubs in urban areas with fewer than 500,000 inhabitants) is another illustration of the weakness in their potential audience compared with foreign domestic teams (six clubs in London, two in Madrid, Rome, Barcelona, Milan, Turin, Liverpool and Manchester).

The shortcomings in the functioning of the democratic game (no referendums, no scientific studies on the economic impact of the project and its social utility, no cost-benefit analyses), the dominant position of pressure groups (the sports entertainment industry) and the power of influence of the sporting authorities (the specifications and standards of the stadium conditioning participation in the competition, the development projects of the resident clubs to be more competitive) lead to the same results as in North America, i.e., almost everywhere fully public financing of large sports venues. Despite the growing budgetary constraints of local authorities and the policy trade-offs they have to make, local authorities are still reluctant to privatise the ownership of sports facilities and the management of facilities that structure the life of the city and territory.

Further information:

Wladimir ANDREFF, *Mondialisation économique du sport*, De Boeck, Bruxelles, 2012.

Robert A. BAADE, « L'évaluation des subventions aux sports professionnels aux Etats-Unis et en Europe : un guide pour le secteur public », *Revue Juridique et Economique du Sport*, Dalloz, n°74, mars 2005.

Jean-François BOURG et Jean-Jacques GOUGUET, *Sport et territoire. Les enjeux pour les collectivités locales*, Presses Universitaires du Sport, Voiron, 2017.

Denis COATES, "Franchises Relocation and Stadium Subsidies", in Paul Downward, Bend R. Humphreys, Tim Pawlowski, Jane E. Ruseski and Brian P. Soebbing (eds), *The SAGE Handbook of Sports Economics*, Sage, London, 2019.

Rodney D. FORT, *Sports Economics*, Third Edition, Pearson, Upper Saddle River, New Jersey, 2011.

Jean-Jacques GOUGUET, « De la difficulté des choix publics en matière de grandes infrastructures sportives », dans Pierre Chaix (dir), *Les grands stades*, L'Harmattan, Paris, 2011.

Jérémie MOULARD, *Nouvelle ressource et évolution du business model : une équation à plusieurs inconnues. Le cas des stades nouveaux stades du football français*. Thèse de doctorat en STAPS, Université de Rouen, 18 novembre 2018.

Related articles: stock market listing, opportunity cost, North American professional sports leagues, naming, club owners, social utility, value.

Financial fair play: a tool to rationalise clubs' financial management?

Definition and objectives

The excessive and recurring debt of many of Europe's top football clubs led UEFA to create the Financial Fair Play system, which was implemented in two stages. From 2011 onwards, clubs had to meet their transfer and staff payment obligations. From 2013, they had to balance their books. Financial fair play is intended to be a more effective way of regulating the European football economy and to restore clubs' economic credibility - rather than the licencing system introduced by UEFA in 2004 - with an assessment based on five criteria: sporting, infrastructural, personnel, legal and financial.

The (ambitious) objectives of financial fair play are to introduce more rigour and rationality into club finances, curb inflationary trends in high salaries and transfer fees, encourage clubs to avoid debt and to prioritise investment in infrastructure, thus restoring fair competition between clubs distorted by excessive indebtedness, while protecting their medium and long-term viability.

For example, clubs participating in the Champions League and Europa League must comply with these new rules: their expenses may not exceed their income for the year by more than 5 million euros. However, accumulated losses from the previous three seasons can be up to €30 million as long as they are covered by shareholders. Stadium investments and training expenses are excluded from the calculation of the financial result. Failure to comply with these measures can result in a series of sanctions, ranging from a warning, a fine, deduction of points from the league table, withdrawal of a title, withholding of revenue, and a ban on entering new players in European competitions.

Financial Fair Play has contributed to more serious, transparent, and uniform management of the clubs, as well as to a consequent improvement in their accounts. The aggregate losses of the 718 European clubs belonging to UEFA's 54 national leagues have gradually decreased - 1.67 billion euros in 2011, - 792 million euros in 2013, - 269 million in 2016. Then cumulative profits appear +579 million in 2017 and +140 million in 2018. This turnaround is also due to the revenue growth in the five major leagues over the same period. The clubs have better calibrated their spending on wages and wage bills to the level of their income. This may reassure operators who in the past have been reluctant to invest in a loss-making economy.

Reviews

Investigations in 2018, by the European Investigative Collaborations consortium revealed, via "Football Leaks", the methods by which some clubs circumvented financial fair play. These techniques include the artificial overvaluation of partnership contracts with subsidiaries of companies belonging to the club's owner and the outsourcing of certain expenses for players' image rights to parallel companies dependent on the club's owner. This form of "financial doping" practiced by many clubs in Europe constitutes a manipulation that alters the integrity of competitions [Schubert and Hamil, 2018].

Moreover, financial fair play focuses on the clubs' deficits and not on their debts. This means that some big clubs with a lot of debt but no deficit are not sanctioned. Other clubs, which spend more than they earn in recruiting talent without having any financial problems because they are owned by very rich states (PSG with Qatar and Manchester City with Abu Dhabi), are regularly subject to disciplinary proceedings by UEFA. The preservation of competitive balance is put forward as a justification for limiting the investments of certain clubs, which would otherwise have the means to grow.

Financial fair play has had no positive effect on the fairness of the competition. On the contrary, it has increased inequalities within European competitions. The gap in attractiveness between the championships has widened to the benefit of those where the 'historic' elite of clubs are represented (England, Germany, Spain, Italy, France). Furthermore, financial fair play has contributed to an even greater imbalance in competition, since its rules have frozen the positions in favour of clubs that have secured revenues or benefited from advantages (debt forgiveness, asset contributions) and that can invest without any contribution from their shareholders [Peeters and Szymanski, 2014].

Real Madrid's spending can reach €750 million, the club's total income per season, while Standard Liege's investments are capped at €60 million, its annual budget. A real barrier to entry thus prevents certain clubs from investing to progress, and this barrier has the same consequence: to produce the same European elite, with protection for the top clubs that have been able to build brands in the absence of any previous regulation.

The result is that the Champions League looks increasingly like a closed league with the presence, season after season, of the same teams from the quarterfinals onwards, constituting, in fact, an oligopoly - contrary to European competition law - of clubs that are rentiers of historical revenues: Real Madrid, FC Barcelona, Bayern

Munich, Manchester United, Liverpool and Juventus Turin. [Petit, 2014].

In the seven years prior to the full implementation of Financial Fair Play (2006/2007 to 2012/2013), 6 different clubs won the European title: Barcelona twice and Chelsea, Manchester United, AC Milan, Inter Milan, Bayern Munich once each. In the following seven seasons (2013/2014 to 2019/2020), only 4 clubs have had access to the final victory: Real Madrid four times, FC Barcelona, Liverpool, Bayern Munich once each.

In the Champions League, before or after financial fair play, the same clubs continue to dominate, the novelty being a greater concentration of titles in favour of a smaller number of teams. The limitation of investments leads to an 'ossification' of the European competition market. It hinders - or even prohibits - the least active clubs from investing to catch up [Rabu, 2016].

Uncertain legal security

The restrictions on investment by clubs and the lack of concrete results in reducing the inequalities between historically hegemonic clubs and new entrants, the latter being keen to compete with them while having limited entrepreneurial freedom, are indications of infringements of European law. By allowing clubs to be excluded from certain competitions based on the way they are financed, UEFA's regulations may not be in line with the principles of free competition. Indeed, a club's economic model, its investment strategy, its presence in an economic market or the arrival of potential investors may be called into question by such a sanction for non-compliance with financial fair play [Puy-Monbrun, 2019].

Legal action has been taken by various economic actors (clubs, leagues, sports agents), who have complained of multiple violations of the freedom of enterprise and the free movement of workers and services. According to its critics, financial fair play is a concerted limitation of investments by UEFA, i.e., collusion of interests, likely to harm fairness of professional competitions governed by competition law: Article 101 of the Treaty on the Functioning of the European Union (TFEU) prohibits illegal agreements and Article 102 prohibits abuses of dominant positions.

The revision of Financial Fair Play in 2018 can be seen as another form of limiting the freedom to invest of clubs willing to recruit massively and quickly to create additional revenues and win titles (such as PSG or Manchester City). Indeed, a new indicator relating to the balance of transfers during a season has been integrated to ensure that a club does not exceed a deficit of more than 100 million euros between purchases and sales of players. If this rule had existed in 2017, PSG, which incurred €420 million in transfer spending that year

(Neymar and Kylian Mbappé), would have had to pay compensation to the tune of €320 million through the sale of numerous players.

If the objectives pursued by financial fair play were considered sufficiently legitimate to justify such infringements of those principles, the measure decided by UEFA would still have to satisfy the requirement of proportionality, that is to say, it would have to be the least restrictive means of achieving those objectives. It should be remembered that the Court of Justice of the European Union may consider a rule which infringes European law to be compatible with it on the twofold condition that the rule pursues a legitimate objective and that it is necessary and proportionate for the attainment of that objective.

Beyond the question of the legality of financial fair play, which is still pending, the major problem for UEFA is its inability to investigate the complex legal and financial arrangements of wealthy clubs and to prove their possible violations of the rules it has laid down. In this respect, the annulment in July 2020, by the Court of Arbitration for Sport (CAS) of Manchester City's exclusion from all European competitions for two seasons illustrates the powerlessness of European football's highest body.

The CAS decision was not based on the incompatibility of financial fair play with European competition law, but on the lack of evidence of the facts alleged against the English club. In this case, Manchester City was suspected of having disguised sources of financing through its owners (the Abu Dhabi royal family) by passing them off as sponsorship, with the assistance of companies dependent on the Emirati owner. The aim was to spend 1.6 billion euros on the transfer market over ten years to improve their competitiveness. There is no doubt that this CAS ruling will further weaken the regulatory power of financial fair play!

Perspectives

Some of the solutions for reducing inequalities between leagues and between clubs lie in financial fair play, but also, and above all, in the methods of access to European cups and the distribution of income from these competitions. Successive reforms of the Champions League have always given new competitive advantages to clubs that have already reached a certain level of economic and sporting development: by offering half of the qualifying places to teams from England, Spain, Germany and Italy, and sharing out the commercial rights in a way that is increasingly favourable to these big clubs.

It is true that the effectiveness of this virtuous circle between investments, sporting results and income is greatly compromised by financial fair play, which hinders the development of new entrants by limiting their spending [Palo Mino, 2015]. This ultimately alters the quality of the marketed product by reducing the uncertainty of the outcome. UEFA could correct these negative effects by changing the criteria for participation in competitions and the way revenues are distributed in a more egalitarian way. The risk, of course, is that the big 'historic' clubs, who largely benefit from the status quo, will leave UEFA's fold and create a private, closed Super League in which they would be shareholders - based on the North American model.

Several other proposals can be made to reduce some of the drawbacks of financial fair play: an authorisation of overspending under the condition of a pre-guarantee (on equity) with a continuation of the limitation of debt financing; a salary cap setting a limit for the wage bill; a luxury tax sanctioning any overspending and redistributed to improve competitive balance; tax harmonisation within Europe to ensure better equity between clubs participating in the same competitions while being subject to very diverse levels of taxation. However, the feasibility and effectiveness of these measures, as well as their compliance with European competition rules, remain to be seen.

The effects of the health crisis linked to the pandemic that emerged in 2020 have further weakened financial fair play. According to a report published by UEFA on 21 May 2021, the decline in revenue of the 55 national leagues under the authority of European football's governing body will amount to 8.7 billion euros for the 2019-2020 and 2020-2021 seasons. As a result, UEFA has decided to relax its requirements by excluding the national leagues from the financial review of the losses incurred by Covid-19 (ticketing, hospitality, merchandising). New arrangements offering clubs more flexibility are being considered for the following seasons. It goes without saying that the European Club Association and UEFA are in a constant battle for influence over their content.

Further information:

Oliver Budzinski, "Financial Regulation as an Anticompetitive Institution", in Markus Breuer and David Forrest (eds), *The Palgrave Handbook on the Economics of Manipulation in Sport*, Palgrave Macmillan, Cham, 2018.

Oliver Budzinski, "The Competition Economics of Financial Fair Play", in Oliver Budzinski and Arne Feddersen (eds), *Contemporary Research in Sports Economics Proceedings of the 5th ESEA Conference*, 2014.

Egon Peter Franck, "European Club Football after "Five Treatments" with Financial Fair Play—Time for an Assessment", *International Journal of Financial Studies,* 6(4), 2018.

Gidon S. Jakar and Stéphanie Gerretsen, "Ownership in European Soccer, Financial Fair Play, and Performance in UEFA's 2006-2018 Champions League Tournaments", *Journal of Sport Management*, january 2021

Franck PALOMINO, « Le fair-play financier est-il soluble dans le droit de la concurrence? », *EDHEC Business School*, juillet 2015.

Thomas PEETERS and Stefan SZYMANSKI, "Financial Fair-Play in European Football", *Economic Policy*, April 2014.

Nicolas PETIT, « Fair-play financier ou "Oligopoleague" de clubs rentiers : Eléments d'analyse en droit européen de la concurrence », 18 mai 2014, htttps://papers.ssrn.com/sol3/papers.cfm?abstract_id=2438399.

Sébastien du PUY-MONBRUN, « Quel avenir pour le fair-play financier ? », *La semaine juridique – Entreprises et affaires*, Lexis/nexis, n°13, 2019.

Gaylor RABU, « *Lex sportiva* et investissements : le fair-play financier », dans Franck Latty, Jean-Michel Marmayou et Jean-Michel Racine, *Sport et droit international. (Aspects choisis)*, Presses universitaires d'Aix-Marseille, 2016.

Mathias SCHUBERT and Sean HAMIL, "Financial Doping and Financial Fair Play in European Club Football Competition", in Markus Breuer and David Forrest (eds), *The Palgrave Handbook on the Economics of Manipulation in Sport*, Palgrave Macmillan, Cham, 2018.

Stefan SZYMANSKI, "Fair Is Foul: A Critical Analysis of UEFA Financial Fair Play", *International Journal of Sport Finance*, 9(3), 2014.

Related articles: club deficit, competitive balance, sporting exception, European professional sporting leagues, regulation, transfer

Naming: A new financial opportunity for clubs?

Definition and origin

Sports naming is a particular sponsorship technique that consists of explicitly associating the name of a company or a brand with an event (the Lancôme Golf Trophy, the Transat Jacques Vabre), a team (Red Bull-TAG Heuer in Formula 1, Groupama-Française des Jeux in cycling) or a competition and training venue (Allianz Arena for Bayern Munich, Groupama Stadium for Olympique de Lyon). This name concession results in an official, unique and exclusive name. The seller of the naming rights can also be a public authority, a resident club or a marketing agency commissioned for this purpose [Bourg and Gouguet, 2017].

Naming has the dual function of identification (conferring an existence) and differentiation (creating an image) to raise brand awareness and increase the turnover of the sponsor company. This process tends to demonstrate to fans the existence of a link between the event, the athlete or team, the site and the title sponsor.

In general, a movement to privatise public space and urban heritage is growing in North America, Japan and Europe. The areas of application are varied: theatres, museums, opera houses, hospitals, universities, squares, metro stations, and cultural arenas. Increasingly more sports venues are specifically being named after brands or companies. The first recorded forms of naming sports facilities appeared in Europe in 1913 with Philips (electronics) for the PSV Eindhoven football stadium, in the United States in the 1920s with Wrigley (chewing gum) for the Chicago Cubs baseball stadium, and in France in 1970 with Ricard (alcoholic aperitif), which financed the construction of the motor racing circuit in the French Var region which bears his name.

The development of sports stadia naming stems from the professionalisation of competitive sport. After the change in the status of clubs from the 1950s in North America and the 1980s in Europe (limited companies), and the evolution of their financing from the 1980s to the1990s (TV broadcasting rights, advertising and shareholders), naming constitutes a further step towards the privatisation of professional sport, although there are strong disparities according to the countries and the disciplines.

Value and interest in naming for sports clubs

The investments made by sponsors and the duration of contracts vary greatly depending on the value of the support in terms of quantity and quality, visibility and citation. Empirically, it is possible to say that the level of economic development of the country, the national and international audience of the discipline, the size of the hinterland of the stadium, the notoriety of the resident club and its media potential contribute to the hierarchy of the sums involved.

An econometric study conducted over a 23-year period and with a sample of 112 contracts for major and minor league stadia in North America shows that the value of naming is primarily determined by the size of the potential audience, including the economic and demographic size of the metropolis in which the stadium is located, the stadium's capacity to host, the level of the resident club and league, the degree of diversity of activities in the use of the stadium, its multifunctionality and modernity [Gerrard, Parent and Slack, 2007].

The United States is the main market for naming rights, with a total cumulative turnover of 3.5 billion euros, an average of 70 million euros per site, and an average contract duration of 17 years, i.e., an annual revenue per club of 4 million euros, which can frequently exceed 20 million. Almost all the clubs in the five main North American leagues (baseball, basketball, soccer, American football and ice hockey) have signed such agreements.

In Europe, the record is held by Manchester City's Etihad Stadium, a club owned by an Abu Dhabi sovereign wealth fund, for which the Emirati airline pays 32 million euros each season. Overall, football clubs benefit most from such a windfall, which increases and diversifies their revenues, allows them to recruit new talent while complying with the financial fair play rules imposed by UEFA and thus increases their competitiveness. More than 80% of the stadiums in the professional top flight in Germany and more than 40% in England have a naming rights agreement.

In France, only 20% of first division stadia have taken the name of a company (Matmut Atlantique for Bordeaux, Groupama for Lyon, Orange for Marseille, Allianz for Nice). This is despite a context that should have favoured the conclusion of such contracts thanks to the construction or renovation of infrastructures linked to the hosting of the 1998 World Cup and Euro 2016. Moreover, the marketing of these contracts is for relatively small amounts (between 2 and 3 million euros per year) and fairly short periods (less than ten years).

Naming can provide an essential or complementary contribution to the financing of infrastructure: 50% for the *New York Mets' Citi Field* (baseball), 45% for the *American Airlines Center* in Dallas (basketball, ice hockey), 25% for Arsenal's *Emirates Stadium*, 25% for Bayern Munich's Allianz Arena, but still less than 5% for French stadia.

What return on investment for the sponsors?

Given the congestion of the traditional advertising market, a sports stadium can be an innovative and immediately identifiable vehicle for a sponsor company, benefiting from extensive media exposure over a long period. This sponsorship of a facility generates repercussions in terms of memorisation. The impact of the naming of the Munich stadium by the Allianz insurance company in terms of spontaneous awareness is ten times greater than that of the sponsorship of the Bayern shirt while costing much less (6 million euros per year instead of 22 million).

However, beyond the recognition of the brand by the fans, it does not seem that a naming action is profitable for the sponsor. Studies in the United States show that this communication tool has no lasting and significant impact on the profitability of the companies that buy these exploitation rights [Leeds, Leeds and Pistolet, 2007]. Greater visibility and media exposure of the brand do not lead to increased consumption of the product by the club's fans.

Large companies, capable of investing tens of millions of euros in naming, are not only looking for a direct return. They are also carrying out an internal communication campaign for their employees. Indeed, many American and German sponsor companies, leaders in this field, choose to name the team that plays in the city where their headquarters are located and where thousands of their employees work.

The development of naming is held back in Europe (particularly in France) by several obstacles of a societal nature. The first is the problem of naming a private brand after an infrastructure that is financed entirely or mainly by public funds. A second handicap lies in the symbolic character of a stadium, which constitutes a marker in the life of a city. Its name, its architecture and its history are anchored in the emotional, personal and collective memory of the fans.

The communicative impact depends on the acceptance of the name by the general public because, in the end, the supporter is, or is not the final consumer of the spectacle offered by the club, as well as the advertiser's products. This is why the iconic stadiums of Old Trafford (Manchester United), Anfield Road (Liverpool) and Stanford Bridge (Chelsea) have not changed their identity despite the financialisation of the Premier League. The same is true of the Stade de France in Saint-Denis and the Parc des Princes in Paris. Moreover, in the latter two cases, a possible naming would have to associate itself with the original identity of the stadium, as was done for the 'Orange Vélodrome' in Marseille.

Further information:

Jean-François Bourg et Jean-Jacques Gouguet, « Le naming : aspects économiques, modalités juridiques, contraintes politiques », dans Jean-

François Bourg et Jean-Jacques Gouguet, *Sport et territoire. Les enjeux pour les collectivités locales,* Presses Universitaires du Sport, Voiron, 2017.

Bill GERRARD, Milena PARENT and Trevor SLACK, "What Drives the Value of Stadium Naming Rights?", *International Journal of Sport Finance*, vol.2, 2007.

Eva Marikova LEEDS, Michael A. LEEDS and Irina PISTOLET, "A Stadium By Any Other Name. The Value of Naming Rights", *Journal of Sports Economics*, vol. 8, issue 6, 2007.

Related articles: sporting venues, financial fair play.

Club owners: capital at the service of sport?

Shareholder and club typology

In most cases nowadays, the legal basis for a professional club is a company whose capital is held by shareholders, whether physical or legal entities. This co-ownership can lead to the distribution of dividends as soon as the company makes a profit. However, this has not always been the case. Indeed, modern sport, conceived at the end of the 19th century, was based on the doxa of voluntary work by association leaders who could not be legally paid.

For several decades, the commercialisation of the sporting spectacle, linked to its growing media coverage, has accelerated the generalisation of professionalism. In North America, this evolution started in the 1920s and 1930s. In Europe, the change began in the 1980s and 1990s. This new age of televised sport has had two consequences: legal, with the transformation of non-profit clubs into corporations; and economic, with the recomposition of professional sport around the classic mechanisms of the market economy (property rights, shareholding, dividends, expectation of a return on investment). Moreover, the globalisation of professional sport through television - especially football - has led to the internationalisation and diversification of shareholders: billionaire oligarchs, investment funds, sovereign wealth funds, dedicated holding companies, states, etc.

The accelerating financialisation of professional sport is also due to the growing capital requirements of a high-performance activity, which is increasingly expensive in terms of recruitment, equipment, technical support and scientific and medical preparation. In addition, the Covid-19 pandemic that emerged in 2020 is negatively impacting the funding of clubs and leagues. The ban or restriction of spectators from stadia has led to a loss of direct (ticketing) and indirect (merchandising, catering, refreshment stands) revenue. The sporting movement has tended to open up more to the presence of companies that were previously outside its vision, notably private equity companies, at the risk of losing control over the governance of clubs and competitions.

Around the world, some investment funds are exploiting the new business model of sport by diversifying their asset portfolios to reduce the risks of these investments and maximise their revenues. They do this by simultaneously acquiring stakes in several European and non-European clubs both in football and other disciplines. Sporting ethics and the integrity of the competition can therefore be affected when these clubs participate in the same championships, and their owners influence the sporting results according to their economic interests [Breuer, 2018].

Examples of such multi-owners include the American holding company Kroenke Sports Enterprises (real estate) with Arsenal and four North American franchises(Los Angeles Rams, NFL, Denver Nuggets, NBA, Colorado Avalanche, NHL, Colorado Rapids, MLS); the American Glazer family (real estate) with Manchester United and the Tampa Bay Buccaneers, NFL; the multinational Red Bull (energy drinks) with two football teams (R.B Leipzig, R.B New York) and two Formula 1 teams (R.B Racing, R.B Toro Rosso Honda); the American Philip Anschutz (oil, railways) with 3 French clubs (Los Angeles Kings, NHL, Los Angeles Lakers, NBA, and Los Angeles Galaxy, MLS); the American fund Fenway Sports with Liverpool and the Boston Red Sox, MLB; the subsidiary Suning Sports of the Chinese group Suning.com (retailing) with 2 football clubs (Inter Milan and Jiangsu Suning Football Club).

In Europe, of the 55 national top-flight football leagues under UEFA's jurisdiction [2020], 43 leagues have one or more clubs controlled by a private company (i.e. 78%), and 27 leagues have one or more clubs owned by foreign investors (i.e. 49%). In contrast, the clubs in 11 leagues are owned by public institutions (local authorities or state-funded bodies). 67 of the 715 clubs (9%) have foreign owners of around 15 different nationalities: American, with teams from 7 championships Arsenal, Liverpool, Manchester United, Tottenham, Bordeaux, Marseille); Chinese in 6 leagues (Aston Villa, AC Milan, Inter Milan); Russian in 4 leagues (Chelsea, Monaco); Emirati (Manchester City), Qatari (Paris Saint Germain), British (Nice), Icelandic (West Ham), Italian (Watford), Thai (Leicester), Swiss (Southampton), Luxembourgish (Lille). It should be noted that, in contrast to the economic evolution of football, 4 football clubs in Spain are still owned by their member-supporters, mainly FC Barcelona (150,000 "socios") and Real Madrid (80,000). See UEFA Benchmarking Report, 2020.

Profit maximisation vs victory maximisation

The standard hypothesis of the theory of the firm postulates that the objective of a company is to maximise its profit. In the field of sport, the economic literature identifies and contrasts two models. In North American leagues, with the profit maximisation model, the organisation of the competition and the role of the league are at the service of the logic of financial gain. In the European competitions with the utility maximisation model, the primary objective is to obtain sporting gains, and the utility function can include, in addition to the number of victories for glory, the number of spectators for atmosphere, competitive balance for suspense and revenue for profitability.

Certain characteristics of the North American and European models have encouraged the arrival of shareholders. In North America, with the principle of closed leagues, the absence of the risk of demotion reduces the risk of sporting hazards, which gives visibility over time that investors appreciate. For Europe, the exponential growth of TV rights and transfer turnover from the 1990s onwards has transformed the football economy into speculative activity. And the implementation of financial fair play, from the 2013/2014 season onwards, has contributed to the rationalisation of club management, with the granting of a licence - necessary to validate the qualification of clubs for the European Cup - being conditional on the alignment of the level of their expenditure with the level of their revenue.

Investments in sports clubs may be driven by direct profitability objectives (profits, dividends, capital gains). Five characteristics are likely to attract financially motivated operators: the quality of the detection and training system, which allows players to be resold on the very lucrative transfer market with significant capital gains; the continuous increase in domestic and foreign TV rights; the international growth potential of the turnover of by-products; the modernity and multifunctionality of sports stadia; the concentration of revenues for clubs qualified for the final competition stages (play-offs in North American leagues or from the quarter-finals onwards for the Champions League in Europe).

However, with the uncertain and low profitability of investments in sport, the takeover of clubs can aim at indirect profitability [Franck, 2010]: in order to convey a positive image on markets outside sport (petrochemical companies), re-establish a tarnished image (oligarchs), seek political legitimacy (Silvio Berlusconi with AC Milan, Bernard Tapie with Olympique de Marseille), generate sectoral strategies (communication groups), penetrate new foreign markets (Chinese investors), develop its image in Western society and spread its brands in promising markets (shareholders in Asia or the Middle East), increase its soft power through sport (China, Russia, United Arab Emirates, Qatar) or launder illegal capital (oligarchs, drug traffickers).

These motives are not necessarily exclusive and can be cumulative. It will be interesting to observe whether the arrival of new investors in European football - already owners of North American franchises for which profit is a privileged goal - will influence the behaviour of other club owners still set in a logic of maximising sporting gains, and potentially influence the overall orientation of the leagues.

Numerous studies show that in Europe in particular, the goal of maximising wins outweighs profit maximisation. Several explanations have been put forward to understand this anomaly concerning the mainstream approach to corporate objectives. The behaviour of sports clubs is determined by the history and legal status of the clubs, the expectations of the supporters, the motivations of the managers, the search for a title, qualification or promotion and the threat of relegation. The search for profit would require limiting salaries, which would reduce the power to attract talent and the competitiveness of the team [Arrondel and Duhautois, 2018].

Sport at the service of a global business project

The example of football may help to illustrate a paradox of the economics of professional sport. It is the most popular sport in the world and yet it has a modest economic activity. Real Madrid, massive in terms of its history, record of success and global notoriety, had a turnover (the highest in world football) of 775 million euros and profits of 76 million (for 2017-2018), which are very small amounts compared to those of large companies (hundreds of billions of euros in turnover and tens of billions of euros in profits). In effect, the average income of a professional football club (85 million euros for the French Ligue 1) corresponds to that of a medium-sized supermarket, not even a chain of supermarkets, but a single supermarket!

However, thanks to new technologies (television, digital), Real Madrid offers its services to hundreds of millions of consumers (fans), which is much more than the number of customers of most of these same said companies. This paradox is explained by a problem of economic appropriability of the football 'good'. Clubs can only appropriate a tiny fraction of the economic value generated by the public's passion for the sport [Kuper and Szymanski, 2014]. A football match often has the characteristic of being consumed together with other goods. However, almost all the externalities of the football spectacle are captured by other economic agents rather than the clubs: the media (apart from those who pay broadcasting rights), hotels, restaurants, bars, betting companies, etc.

This is why several clubs are aiming to create real multinationals around football by imposing their brand to extract more of the value associated with the consumption of this sport. Let us take the example of Manchester City for instance, chosen from one of many possible clubs (Manchester United, Juventus Turin, etc.). The holding company City Football Group (CFG), the owner of Manchester City, wants to become a global company (like Coca Cola) and install a label (City) by using football to penetrate new markets. A strategy of 'glocalisation' - taking a global product and adapting it to local markets - was implemented: the purchase - or acquisition of stakes - in eight clubs on different continents: New York City FC (United States), Melbourne City FC (Australia), Girona FC (Spain), Yokohama F Marinos (Japan), Club Atlético Torque (Uruguay), Sichuan Jiuniu (China), Mumbai City FC (India) and Lommel SK (Belgium), as well as the creation of commercial subsidiaries and football schools in China, Singapore and the Middle East.

The aim is to seize all the opportunities offered by the convergence of entertainment, sport and technology with the hundreds of millions of fans active on social networks. The diversification and nature of City Football Group's shareholding reflect the growing interest of companies from outside the sports world in conquering these markets: the Emirati sovereign wealth fund Abu Dhabi United Group (a public investment fund owned by the Emirati state seeking to make the most of its national savings); private equity firm China Media Capital (CMC); a consortium of Chinese investors, CMC-Citic Capital; and US investment company Silver Lake. The latter, which specialises in new technologies (Alibaba, Dell, Skype, etc.), bought 10% of the City Football Group in 2020 for 500 million dollars, which values the holding company at $4.8 billion.

The ostentatious spending of billionaires

There are increasingly more billionaires in the world (470 in 2000, 2153 in 2019 according to Forbes) and equally more billionaires are investing in sport. At least 140 professional clubs are owned by 109 billionaires according to the UBS bank [Drut,2019]: Russian (energy) oligarchs Roman Abramovich (Chelsea FC) and Dimitri Rybolovlev (AS Monaco), Pakistani-American Shahid Khan (automotive equipment, Jacksonville Jaguars, NFL; Fulham FC), Indian Mukesh Ambani (petrochemicals, Mumbai Indians, cricket), Ukrainian Rinat Akhemetov (energy, Shatkhar Donetsk), American Joe Mansueto (financial services, Chicago Fire FC, MSL), Frenchman François Pinault (luxury goods, Stade Rennais), Briton Jim Ratcliffe (petrochemicals, Ineos cycling team, FC Lausanne, OGC Nice).

The common denominator of billionaires investing in sport is that they have extra-financial motivations, or at least the objective being that the financial aspect is not of primary importance: leisure, disinterested pleasure, conspicuous consumption, global fame, social and political recognition. It is a matter of differentiating oneself by obtaining a status that others will not have; the purchase of cars, boats or luxury houses is no longer sufficient to achieve this. Thorstein Veblen [1899, re-edited 1970] is known to have shown that the notion of conspicuous consumption better explains purchasing behaviour in modern societies than simple utility maximisation. The American economist contextualises the behaviour of agents - who are no longer viewed as simple rational agents - and makes an individual's consumption dependent on the rules and habits of the social group to which he belongs. Thus, the ostentatious spending of the very rich stems from a need for prestige, esteem and recognition, and pecuniary rivalry, since wealth and power must be made visible.

The purchase of a football club, in particular, would make it possible to satisfy this search for distinction by obtaining a position that is difficult to attain: there is only one national champion and one European champion per season. This good thus becomes 'positional' for the owner in the sense that their satisfaction is derived from the fact that others' consumption is lower than their own. This Veblen effect is coupled with a snobbery effect, as when the rich do not want to buy what others buy because they would no longer be able distinguish themselves from others. Roman Abramovich's expenditure on Chelsea illustrates the ostentatious nature of his spending, which results in maximising sporting success without budgetary constraints: from 2005 to 2020, more than two billion euros were invested, returning five Premier League titles and one Champions League title.

Whatever the motivations behind the strategies deployed by club owners, the billions of euros spent each year in the professional sports industry have a considerable impact on all the competitions in which their teams participate: inflationary overbidding on salaries and transfers, distortions of economic competition, sporting imbalance in national and international competitions, lack of fairness in the championships, criminalisation of the sports economy, etc.

Further information:

Luc ARRONDEL et Richard DUHAUTOIS, *L'Argent du football*, CEPREMAP, Paris, 2018.

Markus BREUER, "Multi-club Ownerships", in Markus Breuer and David Forrest (eds), *The Palgrave Handbook on the Economics of Manipulation in Sport*, Palgrave Macmillan, Cham, 2018.

Bastien DRUT, *Mercato. L'économie du football*, 2ème édition, Bréal, Paris, 2019.

Egon FRANCK, "Private Firm, Public Corporation or Member's Association Governance Structures in European Football", *International Journal of Sport Finance*, 5 (2), 2010.

Simon KUPER and Stefan SZYMANSKI, "*Soccernomics: Why England Love and Other Curious Football Phenomena Explained*", Harper Sport, London, 2014.

Thorstein VEBLEN, *Théorie de la classe de loisir*, Gallimard, Paris, 1899, réédition 1970.

UEFA, *Panorama du football interclubs européen. Rapport de benchmarking sur la procédure d'octroi de licences aux clubs*, Union européenne de football association, Nyon, janvier 2020.

Related articles: stock market listing, club deficit, competitive balance, financial fair play, European professional sporting leagues, North American sports leagues, soft power.

Televised sport: broadcasting rights and tele-dependence?

History shows that sport and television have maintained a long and mutual interest. From the 1960s onwards, sport and television have developed by benefiting from their converging and complementary interests. The ability of sport to attract large audiences represents an important source of revenue for the channels, either directly through the sale of programmes (subscriptions to pay-tv channels), or indirectly through the marketing of advertising space (free or pay-tv channels).

Intense competition between channels for the acquisition of broadcasting rights led, from the 1990s onwards to an unprecedented increase in sports revenue resulting from the administrative deregulation of television with the abandonment of the public broadcasting monopoly (in Europe from the 1980s onwards) and a revolution in technologies (cable, satellite, digital, pay-TV).

There are two principal interlinking markets for televised sport. Downstream, the primary market for sports broadcasts, is the forum for exchange between broadcasters (suppliers) and television viewers (demanders). Upstream, the secondary market for sports retransmission rights brings into play the same broadcasters, in this case, demanders, and the sports organisers (clubs, leagues, federations), suppliers of the rights they hold [Bourg and Gouguet, 2012; Bourg, 1998].

The IOC is the owner of the Olympic Games, as well as of their derivative products. Customary law explains the origin of this ownership, as the IOC, under its statutes, has always collected the broadcasting rights and not the athletes involved. Professional leagues are also considered to be the owners of the rights to competition, whether national or continental, insofar as they are the creators and organisers of the competition, while the participating clubs are only physical organisers at a local level.

Standard concepts of competitive and administered markets, as well as auction theory, are used to explain price formation in the secondary market, i.e., the determination of the number of broadcasting rights, which is worth $49.5 billion worldwide (SportBusiness Consulting Global Media Report 2018)

Theories of imperfect markets for broadcasting rights

Of all the markets in the sports economy, those for the market of televised sports broadcasts have the most diverse and imperfect forms [Andreff, 2012]. These markets will become imperfect as agents on both sides of the market try to combine to alter the free play of competition. Several of the assumptions of perfect competition are not respected. The evolution of the legal framework has over time modified the way in which the supply of and demand for broadcasting rights are determined and reorganised the market by strengthening the power of sports organisers vis-à-vis the channels.

In the early days of sports broadcasting, in the 1930s in the United States and the 1950s in Europe, no or very low fees were charged for sport. Since the 1960s in the USA and the 1980s in Europe, television stations have had to pay progressively higher fees.

Around the market structures, four main forms are in place: monopoly, reduced monopoly, bilateral monopoly and monopsony.

The cartelisation of the demand for rights by television stations

A cartel is usually defined as a horizontal agreement between companies involved in the same activity on minimum selling prices (supply cartel) or maximum buying prices (demand cartel) and the quantities exchanged. A cartel of bidders exists when television stations join together in the same organisation (ORTF, a public broadcasting monopoly at the national level; the European Broadcasting Union, EBU, at the international level) to negotiate the purchase of broadcasting rights with sports organisers. The purpose of the cartel is to influence purchase prices and limit the volume of demand.

Two types of market result from this. The monopsony is a rare market favourable to the buyer (the ORTF) who finds themself alone in front of a large number of sellers (the clubs and not the league). In this configuration, which prevailed in Europe from the 1950s to the 1970s, the price paid, but also the volume purchased, is low.

The bilateral monopoly corresponds to the EBU's position for the purchase of rights to international events: a single seller of a specified product has only one customer. This market structure was institutionalised at the European level for some 30 years from 1950 onwards in order to fight against the overbidding of the cartelised sporting offer (IOC, FIFA, UEFA, etc.), and has set itself the objective of controlling demand by means of strict rules (a strategy of ‘going it alone’ is forbidden) to bring prices down. The increase in the number of private and pay-tv channels that are not members of the EBU has reduced its power. This bilateral monopoly was temporary.

The cartelisation of supply rights by sports organisers

This is a case of organising a monopoly through a specific market to control it and to charge prices that are not competitive. In this case, there is a cartel of suppliers when a sports grouping (leagues, federations) is the sole holder of the rights to negotiate the sale of the broadcast with the television stations. It was in the United States, at the beginning of the 1960s, that an excess of competition on the supply side of broadcasting caused a sharp drop in revenue. To remedy this, a cartelisation of the supply in a league was implemented to maximise the turnover and profits of the clubs.

However, the establishment of a single power centre responsible for selling TV rights violated US antitrust legislation (Sherman Act of 1910). Law 87-331 of September 30, 1961, based on the idea that a centralised sale of rights would preserve the balance and interest of competitions, and thus increase the welfare of consumers of sports entertainment, resolved this incompatibility [Andreff, Nys and Bourg, 1987]. In Europe, the collective sale of broadcasting rights - theoretically prejudicial to the principle of free competition - has been admitted by the community authorities under certain conditions (short-term contracts, sale by lots allowing several channels to acquire part of the rights, etc.), to favour the economic and sporting balance of competitions.

The monopoly of leagues and sporting organisations

This market has only one seller facing a large number of potential buyers. Depending on the geographical area of activity, at the national level, the seller is the league, at the global level the seller is the IOC or an international federation. The cartelisation of the sellers eliminates any competition on their side. This collective bargaining has set in motion bidding mechanisms that are all the more effective as demand expands and fragments. In such a configuration, the monopolist (the league, the IOC or the international federation), capturing all the demand, will choose the price (the TV rights) and the quantity (the volume of broadcasts) that maximise its profit.

Like any cartel, the league generally distributes television revenue amongst the clubs on an equal basis. In addition to the benefits of joint distribution for the balance of the competition, the cartel negotiation makes it possible to impose longer-term contracts on the channels than would have been the case if the rights had been sold individually. This way, the clubs have a guaranteed income that is independent of the evolution of their sporting results. In addition, the league aims to keep the broadcasting fees received by the clubs as high as possible. These cartel practices benefit the clubs to the detriment of the broadcasters and sponsors who have to pay high fees and obviously the viewers who have to pay an escalating access fee.

More stable than a league (a cartel of clubs that may be weakened or challenged), the IOC has a de facto monopoly of supply with the Olympic Games, since it is a unique event with no competing or substitutable competition. Its bargaining power, reinforced by this absolute monopoly, explains the very sharp increases in world rights: for the summer Olympics, 0.5 million dollars in 1960 (first TV rights paid), $400 million in 1988, $1.4 billion in 2004, rising to $6 billion in 2021.

The reduced monopoly: the dominant model in European markets

There is a reduced monopoly when a single supplier is faced with a few buyers. This has been the dominant situation throughout the last thirty years (1990-2020), which still continues in most of the major sports in Europe. In football, for example, each national league invites bids from three or four audiovisual groups. In contrast to the former monopsony (clubs - public broadcaster) or bilateral monopoly (league - public broadcaster), which is not very profitable for sports organisers, this system involves a larger number of channels, but also and above all a larger number of broadcasting windows through a system of lot sales.

There is no longer just one request for broadcasting, but several. Until the mid-1980s, the main focus was on live and free-to-air broadcasting of a match, i.e., on a free channel. Today, the market is segmented and demand covers several forms of exploitation: live, delayed, full, summary, free-to-air, encrypted, pay-per-view. The rights sold concern exclusivity for a type of broadcast, and no longer only geographical exclusivity.

This new possibility of negotiating with alternative media for the same broadcast, which is then resold twice or three times, increases competition on the demand side and increases the profitability of the product. As a result of this multiplicity of rights, television has been the main source of income for football clubs in all European countries since the mid-1990s (35 %), rising to between 45 % and 55 % since the early 2000s. Thirty years earlier, this percentage was less than 5 %.

Auction theory

Beyond the evolution of the forms of the broadcasting rights market, which have become very favourable to sports organisers, the exponential growth of TV revenues can also be explained by the modus operandi chosen by these organisers to sell an asset, which is often unique [Lévêque, 2017]. Indeed, auction procedures can ensure an efficient allocation.

Auction theory analyses, with the tools of game theory, the strategic behaviour of different economic agents with opposing objectives, as well as the interactions and games of influence between them: the seller and designer of the auction (the sports organiser), the bidders (the television stations), and the auction mechanisms.

The actors value the good in different ways and are partially unaware of how other agents value it.

How can a price be established when it is not established on a traditional market, but by the competition of subjectivities and in a context of asymmetry of objective information (the true value of the object of the auction)? How can we foresee, anticipate and thwart the strategic behaviour of the actors? Whatever the other 'players' do, it is always in the bidder's interest to make an offer for an amount equal to his 'real' valuation of the object in the auction.

Offering a price lower than one's willingness to pay reduces the bidder's chances of winning the auction. Conversely, announcing a price higher than its private valuation increases the probability of winning, but exposes the bidder to pay more than it is willing to pay, and thus to buying at a loss. In other words, the dilemma for television stations can be summarised as follows: accept the overpricing of the rights to maintain an attractive but expensive offer, or contain their costs by not bidding higher, but at the risk of losing subscribers.

The particularity of the sports economy is that it is based on monopolies of competitions, whose owners/organisers strive to perfect their bidding systems to secure the greater part of these monopoly rents. If the auction is well designed, the bidder bets all the profit he hopes for. He does not make money and may even lose money if he makes mistakes. This is often the case for the summer and winter Olympics, the World Cup, the Euros, the Champions League, certain national football championships and the American Football Championship.

However, it does not make economic sense to buy rights that pay less than they cost. The bidding TV station should not offer more than the sum of the discounted profits it would receive from the deal if it were to win. However, uncertainties about the actual value of the object of the auction and about the estimated willingness to pay of the consumer (the viewer) complicate the strategy. How many subscribers will this exclusive broadcasting right gain? By how much should the subscription price be increased? What effect will an increase in the subscription fee have on existing and potential future subscribers?

An illustration of the *winners' curse*: football

The principle of the auction is that the most optimistic (or bluffing) of the candidates wins. There is therefore a permanent risk of a winners' curse, as the winner tends to overestimate the coveted asset. The television rights to French football sold in 2004, according to the so-called "first-price auction" procedure, is a good illustration of this. The TF1 group's strategy consisted in pushing Canal Plus - by sending signals demonstrating its great interest in these TV rights - to pay more than 600 million euros per year for three seasons, whereas at the time of the opening of the bids, the sum proposed by TF1 (326 million) showed that its only objective was to place Canal Plus in the "winner's curse" position in order to destabilise its economic model.

The Ligue de Football Professionnel (LFP) organised a sequential auction for a period of four years (2016-2020), where six lots were successively put up for sale, ranging from lot 1, the most attractive with the broadcasting of two live matches, to lot 6, the least attractive with the broadcasting of excerpts from all the matches in a delayed format. Canal Plus won the first two packages for €540 million per season. BeIN Sports won the other four lots for 160 million euros per season. This represents an overall annual contract that is 20% higher than the previous one and revenue that is six times higher than the contract signed in 1999.

As a result of this purchase, Canal Plus was expected to generate revenue of 2.7 billion euros from 2016 to 2020 (new subscribers, more expensive subscriptions, retention of old subscribers). BeIN Sports, for its part, was counting on 800 million euros. Traditional business secrecy does not allow us to verify whether such objectives have been met, even though both broadcasters were in a rather delicate situation at the end of this contract (loss of subscribers, deficits, etc.).

From 2020 until 2024, the rights for French Ligue 1 and Ligue 2 were to reach €1.15 billion per season for the seven packages, with €780 million coming from the Chinese-Spanish agency Mediapro for 85% of the live Ligue 1 matches, a further 64% increase on 2016-2020. Mediapro's financial difficulties with its pay channel "Téléfoot", which came to the forefront at the start of the first year of operation due to an insufficient number of subscribers (600,000 instead of the 3.5 million hoped for as a break-even point), reflected the extent of the market's overestimation. This is all the more true given that the average audience in 2019-2020 (the last year of the previous contract with Canal Plus) was 851,000 viewers and that the record for the season, held by the PSG-Olympique de Marseille match, had attracted only 1.9 million viewers!

With the foreseeable withdrawal of Mediapro and the inevitable closure of the Téléfoot channel in December 2020 after only four months of activity, as well as the downward purchase by Canal Plus of the broadcasting rights until the end of the current season, initially held by Mediapro, the amount of TV revenue for 2020-2021 fell by 41% (680 million euros instead of 1.15 billion).

In the following seasons, the value of the French Premier League product lacked homogeneity and attractiveness, and potential broadcasters were no longer willing to outbid each other as in the past. This deflationary trend was confirmed by the marketing of the broadcasting service for the period 2021-2024: 663 million euros per year. This drop would have been more significant if Amazon, the world's number one e-commerce company, had not bought the main package (80% of the matches) to feed its Amazon Prime (Prime Video) broadcasting platform to attract a maximum number of subscribers to its delivery service. The market for the rights to the French football championship contrasts sharply with that of the English Premier League, whose national and international rights exceed 1.8 billion euros per season for 2022-2025 [Buraimo, 2019].

The inflationary mechanisms of football auctions

There are two main reasons for the inflation of TV rights. The sellers (sports organisers) are capturing an increasing share of the revenue generated by the broadcasting of sports events. The buyers (the channels) covet increasing revenues from the broadcasting of events.

The sellers' strategy is to divide the product being auctioned into several lots, sequence their bidding in descending order of intrinsic value, and prevent a single bidder from acquiring them all. In this way, they succeed in bringing other candidates into the game. Experience shows that the more participants, the more intense the competition and the greater the overestimation. The aim is to get the bidders to formulate bids for each lot that tend towards their maximum willingness to pay. Obtaining these broadcasting rights indeed allows the winner not only to reserve their commercial exploitation but also to weaken his competitors who are deprived of the offer. By obtaining exclusive rights, the winner of the auction increases the value of his portfolio while reducing the value of his rivals'.

The sequential nature of the auction also contributes to intensifying competition, unlike ascending auctions in which each actor knows 'his' value of the goods sold, i.e., the value at which he will stop bidding. Once lot 1 has been awarded, only the winner knows to whom it has been awarded and at what price. The other bidders only know that they have lost the first round. The competition for the second lot will be much more intense than in a simultaneous auction procedure where all the candidates would have submitted their bids for all the lots at the same time.

By optimising the choice of auction mechanisms, the sellers of rights can thus approach a cut-off point: cashing in the entire monopoly or scarcity rent, i.e., the profits expected by the buyers from their subscribers and advertisers. At this point, the buyers pay the sellers everything they earn and thus make a zero profit on the rights they exploit. In this case, the auction dissipates the buyers' ex-ante gains. Competition between bidders leads to the same result as perfect competition: zero profit [Lévêque,2017].

The revenue expected from television broadcasts is increasing because football is more attractive than other sports and generates more viewers, subscriptions and advertising revenue than other programmes (unique spectacles, live events with an uncertain outcome). These elements allow the channels to buy TV rights at a higher price. In doing so, are the channels getting closer to the maximum amount that viewers are willing to pay (720 euros per year for the national and international football offer in France, 2016-2020), or can they even exceed this threshold of acceptability (1020 euros for the same offer, 2020-2024)? The failure of Mediapro provides an unambiguous answer. From now on, the fans will be more demanding on the quality of the content of the offer proposed to them and vigilant on the quality/price ratio.

Lessons and perspectives

The candidates for the acquisition of TV rights are progressively more numerous and diversified, and this is within the framework of the increasing internationalisation of the broadcasting of sporting events: free television channels, national and foreign pay-tv channels, and Internet access providers. Soon, might digital giants invest massively in sports rights to improve their brand image with states and populations? [Drut, 2019]. These digital giants (Western GAFAMs, Chinese BATXs, etc.) are looking for products and content to diversify their multiplay offers. Additionally, these rights can be amortised over a large number of subscribers.

However, more overbidding for broadcasting rights means more money for the athletes and less money for the viewers. Most of the TV rights revenue from the auction goes to the event owners, who in turn spend most of it on sports transfers and salaries. The more exclusive TV rights are profitable, thanks to heightened competition between TV channels and sophisticated auction techniques, the more viewers that are financially involved. Subscribers to pay-tv channels finance the league and the clubs and indirectly pay the salaries of players, coaches and sports agents because the channels do not make money in this type of market.

But the viewer's willingness to pay has its limits. It is now very difficult to attract and retain new subscribers, as viewers are being solicited by different subscription offers. In addition, how televised sport is consumed is changing thanks to digital platforms that give access to 3,500 television channels from all over the world, with broadcasting, legal or illegal, free or at very low cost (streaming websites, Internet Protocol TeleVision offers, so-called "IPTV").

Sports piracy is said to account for 20% of the broadcasting audience, if this phenomenon were to increase, what value would TV rights have at future auctions? The digital giants could be taxed because they are the vectors of such new illegal consumption practices.

The television dependence of sports organisers (30 to 50% of the turnover of events) may call into question the economic model of professional sport if there is an unfavourable downturn in the broadcasting rights market! Is the post-Bosman deregulation of football, with its consequences of transfer liberalisation and wage inflation, the harbinger of a crisis, since TV revenues could become unstable or decline, and would no longer be able to compensate for the financial abuses of this deregulation?

Further information:

Wladimir ANDREFF, *Mondialisation économique du sport*, Bruxelles, De Boeck, 2012.

Wladimir ANDREFF, Jean-François NYS et Jean-François BOURG, *Le sport et la télévision : relations économiques*, Paris, Dalloz, 1987.

Jean-François BOURG, « Relations économiques entre le sport et la télévision » et « Structures des marchés du sport télévisé et bien-être social » dans Jean-François Bourg et Jean-Jacques Gouguet, *Analyse économique du sport*, Paris, Presses Universitaires de France, 1998.

Jean-François BOURG et Jean-Jacques GOUGUET, *Economie du sport,* 3ème édition, Repères, Paris, La Découverte, 2012.

Babatunde BURAIMO, "Exposure and Television Audience Demand. The Case of English Premier League Football", in Paul Downward, Bend Frick, Brad R. Humphreys, Tim Pawlowski, Jane E Ruseski and Brian P. Soebbing (eds), *The SAGE Handbook of Sports Economics,* Sage, London, 2019.

Bastien DRUT, *Mercato. L'économie du football au XXIème siècle*, Bréal, Paris, 2019.

François LÉVÊQUE, Les habits neufs de la concurrence, Paris, Odile Jacob, 2017.

Related articles: competitive balance, European professional sporting leagues, North American sports leagues.

CHAPTER III– THE GLORIOUS UNCERTAINTY OF SPORT

It is necessary to define competitive balance, a concept that has been at the centre of the economic analysis of sport since the first American studies in the mid-1950s. Beyond its obviousness, competitive balance is a notion that is difficult to measure or even legitimise. There are many debates about the indicators to be used, the factors of competitive imbalance to be analysed and the means to combat them.

Competitive balance: what challenges to a central concept of sports economics?

Definition

Competitive balance has always been at the heart of sports economists' thinking. In fact, in professional team sport championships, the spectacle is produced by two competing teams and its attractiveness depends on the balance of forces present. This means that the more balanced the competition, the greater the interest for the fans and the higher the revenue for the league. This is why improving competitive balance is seen by most analysts as a legitimate goal.

Whomever the authors of reference are, it would seem that the common point of all the definitions put forward relates to the sporting quality of the teams: competitive balance is the distribution of the sporting quality between the teams in a league. Remember that the sporting quality produced by a team is equated with the percentage of wins it achieves. It is therefore assumed that if the percentage of victories is well distributed amongst all the teams then this reflects a balance of power. However, to produce this quality of output, inputs are needed that are largely made up of sporting talent (in addition to infrastructure and administrative and sporting facilities). One might therefore think that it is sufficient for a league to regulate the distribution of sporting talent between the clubs to achieve a competitive balance, but the reality is much more complex.

Competitive balance can be seen as a public good that benefits all players, which implies that clubs should be able to achieve a maximum of victories and the highest ranking while not unbalancing the league too much by doing so. This means that, as with all public goods, there is a high risk of free riders, i.e., clubs that would like to take advantage of the financial benefits of the improved competitive balance but do not pay the price. This is why a system of regulation of certain markets has been envisaged to avoid the abuses caused by the clubs' desires to maximise their victories. In concrete terms, instruments are used to limit the mobility of players (reserve clause, rookie draft, transfer regulations, etc.), to limit the wage bill, and to establish revenue-sharing arrangements. Based on economic theory and the experiences of both the United States and Europe, a debate exists amongst economists as to the real effectiveness of all these instruments. But to test such effectiveness, a reliable measure of competitive balance is needed.

A difficult and contested measure

The measurement of competitive balance raises many controversies amongst economists, as no instrument is perfect. Very often, the distribution of sporting quality is apprehended through the calculation of an index of concentration or dispersion of victories at the end of the sporting season. This ex-post measure of competitive equity has been the subject of much debate amongst economists:

- First of all, there is the choice of the statistical indicator best able to reflect the reality of the evolution of competitive balance: Lorenz curve, mean deviation index, concentration index, Herfindahl index, etc. The most commonly used criterion is the ratio of the standard deviation of the actual percentage of wins to the theoretical standard deviation. This measure has been the subject of many criticisms. Indeed, beyond a measure of the dispersion of the effective performances around the ideal theoretical situation, it would be necessary to verify whether, from one year to the next, the same teams or not are at the top of the ranking. It would be perfectly possible to have a very balanced and close championship with a low dispersion index, but in which the top places are always taken by the same teams. This is the current situation in the English Premier League.
- Then there is the consideration of the temporal dimension of the analysis. The economic literature has dealt with this incertitude in three temporal dimensions: the match; the season; the long term. These three analyses are interesting, but in our opinion, it is the analysis of competitive balance at the level of the sporting season that is most relevant. The sports season in terms of the uncertainty of outcome will be more or less attractive depending on the strategy of acquiring sports talent adopted by each club. This strategy itself depends on the rules laid down by the League to go up, down or access lucrative competitions. It is therefore a question of determining the economic basis on which the player purchase or transfer policy is decided. It is recognised that professional team sport leagues in Europe consist of three segments: four or five top teams competing for the championship and a place in European competitions; the middle group, whose clubs are fighting in the knowledge that they cannot win the league; the bottom group, whose clubs are fighting to avoid relegation to the lower division. Despite the ever-present uncertainty, each club will invest in sporting talent according to the size of its home market, which makes it possible to understand, on average, the maintenance of a competitive

imbalance. Here we find a well-established result that there is a conflict between the individual interests of the clubs and the collective interest of the league. It is, therefore, necessary to know whether a regulation of the effort of each club by the league would improve the achievement of competitive balance.

- Finally, there is the question of the relevance of such an indicator of dispersion or concentration of victories, which would not reflect the profound nature of sporting competition. Indeed, it is possible to distinguish two concepts: competitive balance, which measures the quality of the teams, and competitive intensity, which measures the durability of the confrontation. The competitive balance may deteriorate but the interest of the competition is elsewhere and the competitive intensity compensates for the previous deterioration. This intensity can come from numerous factors: local derbies, old disputes between teams, the stakes of a European selection or the stakes of relegation to a lower division. This qualitative competitive intensity is of course much more difficult to measure but also to formulate than the classic quantitative conception of competitive balance (distribution of sports victories). This is why, beyond the difficulties of measurement, we must also look at the factors of competitive imbalance and the means of combating it.

The factors of economic imbalance

- ***Market size***

Economic studies carried out in Europe largely show that the richer a club is, the higher its probability of reaching the top of the standings. Given these results, one might think that since a club's wealth often depends largely on the wealth of the territory that supports it, the sporting performance of clubs will ultimately depend on the economic health of the host cities. Nevertheless, there is no clear relationship between the size of a market and the performance of its team. This certainly reflects the fact that this relationship is the result of the interaction of multiple variables. It appears that the local economic potential largely determines the amount of sponsorship, merchandising and media resources the club has available to it. Thus, with a consequent budget, the club can buy the best players available and maximise its wins. But, beyond this simple linear relationship, other feedback loops with multiplier effects can be set up and such amplification effects will be different for different clubs. In the end, the general relationship between local economic potential and sports results is not easy to test because of the overall complexity of the interactions, but also because not all these causalities are automatic. If we take the example of France and the Ligue 1 football league, it appears that there is no linear relationship between the economic weight of cities and their sports ranking beyond the two obvious cases: the richest cities that regularly obtain good sports results; the smallest cities that succeed with varying degrees of difficulty in maintaining their position in the bottom half of the table. Between these two borderline cases, the non-linearity of the relationship is verified with the situation of the richer cities, which are clearly under-ranked. This means that while economic wealth is a necessary condition for being highly ranked in sports, it is not a sufficient condition. Conversely, the case of small cities that are regularly over-ranked confirms the complexity of the relationship or the need to take into account other factors that explain sports performance. In order to understand these French paradoxes, it is necessary to take into consideration the regulatory instruments that have been implemented to try to maintain a competitive balance. This balance would certainly have been upset to the benefit of the most powerful cities if the market had been allowed to operate freely. This means that regulatory instruments, such as the redistribution of broadcasting rights, can reduce the consequences of the differences in wealth on the sports ranking and improve the competitive balance of the championships.

- ***Financial doping***

The wealth of a club can also come from the massive injection of capital from rich investors as we have seen in the case of Chelsea, Manchester City or Paris Saint Germain. This would create a virtuous circle for the richest clubs that could be self-generating: the injection of external capital allows for increased spending on salaries and transfers leading to the concentration of sporting talent and success. Competitive imbalance is the result of real financial doping in favour of the biggest clubs. Conversely, there is a vicious circle for the smaller clubs who are fighting to avoid relegation. Therefore, we have to ask ourselves how we can fight against this logic of competitive imbalance, which only profits too few clubs. Spain is a good example of a duopoly concentrating most of the sporting talent and victories (Barcelona and Madrid) and on the other side the majority of clubs experiencing considerable financial difficulties. It will also be necessary to answer a paradox: how to understand the social acceptability of the current system despite the damage to sporting integrity caused by this financial doping?

In the end, the local economic potential, the instruments of regulation of the sporting sector and competitive balance are closely linked without it being possible to establish general laws that are indisputable. However, strong trends appear. First, there is a positive relationship between local economic potential and sports results, especially when the market functions freely. In this case, the clubs in the richest territories largely dominate the others. Also, market regulation instruments and income redistribution methods can be used to improve competitive balance. The French example shows that such instruments can be effective at the national level, but at the same time, they can jeopardise the international competitiveness of clubs. It is becoming increasingly clear that a solution to the financial crisis affecting many European clubs will come from the political ability to set up European bodies to coordinate and regulate national leagues. In terms of competitive balance at the European level, too many free riders exist willing to take advantage of this situation without paying the cost. Moreover, this raises the whole problem of the risk of setting up closed private leagues at the European level.

Further information:

Wladimir Andreff et Stefan Szymanski (eds), *Handbook on the Economics of sport*, Edward Elgar, Cheltenham, 2006.

Jérémie Bastien, *Le football professionnel européen dans un système capitaliste financiarisé en crise : une approche régulationniste des facteurs de changement institutionnel,* Thèse de sciences économiques, Université de Reims Champagne-Ardennes, 2 017.

Related articles: club deficit, financial fair play, North American professional sports leagues, luxury tax, club owners, regulation, rookie draft, salary cap, segmentation.

Luxury tax: solidarity and uncertainty of outcome?

Definition and modalities

Following the salary cap and the rookie draft, luxury tax is chronologically the third instrument for the regulation of the sports labour market implemented in certain North American leagues. Luxury tax was applied in the MLB from 1997 to 1999, then again from 2003. In 2006, it was renamed the "competitive balance tax". A luxury tax was first considered in the NBA in 1999 and used from 2003 onwards.

The payment of a luxury tax allows clubs to spend more than the salary cap when it exists (NBA), or more than an amount set by the league if it does not exist (MLB). Luxury tax is negotiated within the framework of the Collective Bargaining Agreement (CBA) between the league, the franchise owners and the players' unions. It is based on three main parameters: the threshold triggering the tax, the tax rate and the redistribution of the revenue collected. The first two levers determine the tax revenue [Gustafson, 2006].

In the NBA, the calculation of the tax is based on the revenues of the league's franchises (Basketball Related Income, BRI), as with the salary cap, but with a specific percentage. The threshold activating the tax is on average 21% higher than that of the salary cap and therefore only concerns the highest spending teams.

The luxury tax scale works exponentially: 150% for any excess over the ceiling between 0 and 5 million dollars, 175% from 5 to 10 million, 250% from 10 to 15 million, 325% from 15 to 20 million, 375% from 20 to 25 million, and so on. In other words, clubs may have to pay $1.5 million for each million-dollar overrun, then 1.75 million, 2.5 million, 3.25 million, 3.75 million, etc.

Under pressure from NBA franchises located in small markets, a repeater luxury tax was created in 2013 for teams that exceed the luxury tax cap at least three times in the previous four seasons. Using the previous illustration, a club must pay an additional financial penalty for these repeat offences of $2.5 million for each million exceeded for the first tier, then $2.75 million, $3.5 million, $4.25 million, $4.75 million, etc.

During its first application period (1997-1999) in the MLB, the trigger level for luxury tax was an average payroll calculated between that of the fifth and sixth highest spending franchises. The amount of the tax was 34% of the excess of the authorised salary cap. With the new tax in force since 2006, the tax rates become progressive as soon as there are successive repetitions: 20% for the second season of exceeding the ceiling, 30% for the third and, 50% for the fourth.

Objectives

The regulation of the player market is fundamental in a highly skilled industry like sport, whose value depends on the balance of the competition. Therefore, some economists have proposed a tax to strengthen economic solidarity within the league and to stimulate the uncertainty of the outcome.

Gary Becker [Becker, 1994] imagined a tax on all MLB teams' spending on sports performance. According to Becker, this would have three positive effects: a slowing down of the bidding war between clubs to improve their performance; redistribution of the proceeds of this tax to all clubs, especially the less wealthy ones; and equalisation of economic and sporting potential.

The luxury tax, created in two major North American leagues, is therefore not intended to prohibit any breach of the salary cap, but to make it more expensive. The purpose of the tax is to limit excessive bidding, contain salary cost inflation, equalise salary expenditure amongst teams, promote competitive balance in the league and avoid bankruptcies.

The economic and sporting consequences

The NBA is one of the professional leagues where the issue of competitive balance is problematic. The high rate of both the luxury tax and repeater luxury tax (several tens of millions of dollars per club per season for the biggest spenders) is intended to supplement the soft salary cap, which does not really reduce the disparities in the wage bill. However, few teams, and almost always the same ones, are affected.

There are three categories of franchises in the NBA, two of which do not pay tax or around 80% of the 30 clubs. A third of the league (about ten teams) is below the salary cap, a little less than half is above the salary cap but below the luxury tax (a dozen teams) and the rest exceed both the salary cap and luxury tax thresholds and thus pay one to two taxes (five/six teams). Between 2003 and 2016, $1.233 billion was collected, an average per season of $88 million. Unsurprisingly, five franchises based in a large demographic and economic market (New York, Los Angeles) pay 62% of the tax. Overall, the application of luxury tax and repeater luxury tax seems to have improved the NBA's competitive balance, compared to the seasons that preceded their introduction, albeit not in a very substantial way.

In the MLB, the ceiling at which taxation begins is so high that few teams are subject to it. In the first three years of the luxury tax (1997-1999), eight clubs were taxed for a total of $31 million, an average of $10 million per season. Two of them were taxed every year and paid 65% tax. Between 2003 and 2017, eight teams were also taxed, out of the league's 30, for a total levy of $518 million, or an average of $35 million per season. Six of these teams were taxed on a one-time, marginal basis (9% of the total tax levied).

In contrast, two baseball franchises, also operating in large markets (New York, Los Angeles), pay the tax each season and contribute 91% of the total collection ($470 million). The enduring sporting dominance of the New York Yankees, the league's most successful club (27 titles), seems to have been affected (only one title over these fifteen seasons) by the level of its tax levies ($320 million, or $21 million per season on average and 62% of the league total).

In the MLB, the first tax created in 1997 did not have a very significant impact on limiting the expenses of high-revenue clubs. Instead, several studies show that the luxury tax implemented from 2003 onwards has had a tangible effect on competitive balance, thanks in particular to the progressive nature of the rates in the event of successive overruns [Ajilore and Hendrickson, 2007]. Luxury tax has restricted the wage expenditure of high-revenue teams. The analysis of player transfers through their mobility between clubs makes it possible to observe a more balanced distribution of talent, with a decrease in the flow of the best players to the richest clubs being observed during the second period of the application of the tax [Maxcy, 2011].

Learnings

The organisational model of North American professional sport is supposed to serve an economic logic of maximising profits. The standard literature shows that, as competitive balance decreases, the interest of fans, media and sponsors also decreases. As a result, the revenues and profits of the league and the clubs are affected. The aim is therefore to reduce the financial inequality between franchises in large markets and those in small markets. The goal is to achieve an even distribution of talent amongst teams and to make sporting results less predictable. It is in this context that the luxury tax was introduced, either to compensate for the absence of a salary cap (MLB), which could not be adopted following the categorical refusal of the players; or to compensate for the weak impact of the soft salary cap reconciling freedom of salary expenditure and financial equalisation (NBA).

The tax transfers the income from the players to the beneficiaries of the tax proceeds, unlike the salary cap, which transfers the income to the franchise owners. The distribution of the tax revenue can be wholly independent of the teams' sporting results and turnover. This is the way the MLB operates, with 50% going to a fund to finance player training and 50% allocated to a baseball development programme. In this case, the tax has no impact on competitive balance.

Conversely, in the NBA, subsidies can be allocated to clubs whose wage bill is below the double taxation threshold, i.e., to the least expensive and theoretically weakest teams. The latter can thus achieve higher profits than the highest-spending teams after the league has paid back the subsidy [Dietl, Lang and Werner, 2010]. The tax may reduce the demand for superstars by taxed teams, as well as their remuneration, making these stars accessible to smaller teams amongst which the tax proceeds are distributed. Thus, the luxury tax has a direct redistributive effect.

If subsidies are distributed inversely to club revenues, then winning and thus increasing revenues decreases the subsidy to be received by the team and makes winning less profitable. This can worsen competitive balance in that smaller teams with less investment in talent have less incentive to win.

The numerous variants of luxury tax do not have the same effect on the level of wage expenditure, the degree of talent concentration and the balance of competition. The effectiveness of the tax depends on how it is implemented (trigger level, percentage levied, beneficiaries of the revenue collected). The mix of objectives of clubs within a league (financial gain/sporting gain) can also modulate the impact of the tax, as the investment in talent is more or less important depending on the priorities of the clubs, due to the absence of a sporting sanction at the end of the season (no relegation).

To conclude, generally the notion of competitive balance is put forward to justify the decisions of professional leagues to change the competition rules (salary cap, rookie draft, luxury tax, TV rights sharing). However, as shown by certain academic work the hypothesis that competitive balance increases the utility of fans, i.e., their expenses, and therefore the revenues of professional clubs, is far from obvious [Arrondel and Duhautois, 2019]. The uncertainty of the outcome does not seem to be the only factor explaining the demand for sporting spectacles since a portion of the fans declare themselves ready to follow the matches even in the case where there is no suspense. Many other factors influence the 'consumption' of sport: attachment to the club, the performance and prestige of the team, the quality of the matches, the comfort of the sports venue, the ticket prices and the presence of stars. The concept of competitive balance, which is at the heart of the economics of sport, with a mainstream vision, must be the subject of new research likely to question its relevance, its content and its interest.

Further information:

Olugbenga AJILORE and Joshua HENDRICKSON, "The Impact of the Luxury Tax on Competitive Balance in Major League Baseball", *Working Paper,* n°07-27, International Association of Sports Economists, North American Association of Sports Economists, march 2007.

Luc Arrondel et Richard Duhautois, « Les supporters français de football sont-ils sensibles à l'incertitude du résultat ? », *Economie et Statistique*, n°513, 2019.

Gary S. Becker, "Baseball: how to level the playing field", *Business Week*, New York, 10 October 1994.

Helmut M. Dietl, Markus Lang and Stefan Werner, "The Effects of Luxury Taxes on Competitive Balance, Club Profits, and Social Welfare in Sports Leagues", *International Journal of Sport Finance*, (5), 1, 2010.

Elizabeth Gustafson, "The luxury tax in professional sports", in Wladimir Andreff and Stefan Szymanski (eds), *Handbook on the Economics of Sport*, Cheltenham, Edward Elgar, 2006.

Joël G. Maxcy, "The Effect on Player Transfers of a Luxury Tax a Club Payrolls: the Case of Major League Baseball", in Wladimir Andreff (ed), *Contemporary Issues in Sports Economics*, Cheltenham, Edward Elgar, 2011.

Related articles: sports agents, competitive balance, sporting exception, regulation, rookie draft, salary cap, transfers.

Regulation: How to reconcile balanced sporting competition with fair economic competition?

Definition

The field of 'economic science' is not homogeneous and is based on four major paradigms that are radically opposed to each other: the followers of Adam Smith (foundations of liberalism); the followers of Karl Marx (class struggle is the driving force of history); the followers of John Maynard Keynes (the State must intervene to re-launch the economy); and the followers of Joseph Schumpeter (institutions and power struggles are at the heart of the functioning of modern economies). Beyond these doctrinal oppositions, it is possible to identify two main schools: on one side, mainstream economics, which claims the scientific nature of economics (microeconomic analysis, methodological individualism, market equilibrium, economic rationality, mathematical economics and pure economics); on the other side, heterodox economics, which goes back to the sources of political economy (macro-economical analysis, holism, institutional analysis, applied economics). The economics of sport has not escaped this division. In the orthodox approach, microeconomic studies are devoted to the analysis of the main sports markets: the labour market, the market for broadcasting rights, the market for sports broadcasts, and the market for live sports events. In the heterodox approach, macro-economic and institutionalist works analyse the economic impact of sport, sporting externalities, sport globalisation, labour market segmentation, regulation policies and the organisation of professional sport.

The choice between these two paradigms depends on one's confidence in the market's ability to regulate the economy. From a purely liberal point of view, it would be enough to let the market function freely, as it would be the best regulator of the economy, provided it is not itself regulated. The theory of regulation began with a critique of the claim that markets are self-regulating and automatically lead to the economic optimum. It is the questioning of a model of perfect rationality with individuals interacting in a market in pursuit of their own interests. Instead, the theory of regulation proposes to take into account the structures within which economic agents evolve and which influence their behaviour. The equilibrium of exchanges between rational agents in a competitive market would be ideological. Indeed, economic relations evolving in unequal and imperfect social structures are the result of permanent power relations that give birth to unstable and temporary compromises. The challenge of regulation theory is to know how to find a balance in fundamentally conflicting societies: how to regulate violence and integrate individuals and social classes whose interests are radically opposed, into a single whole? How can this cohabitation be maintained over time while resisting exogenous shocks resulting from technical, demographic and ecological upheavals?

Great crisis

According to the Annales school (Ecole des Annales) - the great inspiration of regulation theorists - the economic system can be broken down into three interdependent sub-systems defined by their periodicity and rate of evolution. A first subsystem includes phenomena that evolve continuously and according to an intelligible long-term trend, such as population, technology, and the size and location of production facilities. A second sub-system groups together the economic agents who create the economy in the short term and are distinguished essentially by their position and power: some own the means of production and make decisions, while others have only their physical being or 'arms' to survive by and carry out their work. The search for the maximum rate of profit is the driving force behind this sub-system, which is constantly being restructured as a result of competition between producers, capitals and territories.

These first two subsystems interact with each other and the competition of capital explains the long-term evolution of technology and the concentration of companies and their location. Conversely, to explain the return of these heavy trends to the economic system in the short term, we need to introduce a third sub-system made up of the institutions that regulate the economy: money, finance, competition, justice, police, etc. These institutions regulate the violence surrounding the sharing of added value in the short term, taking into account the very long-term economic structures.

Contradictions may arise: for reasons of inertia, the institutional system may be out of step with long-term trends. The regulation of the economic system in the short term is no longer possible and we enter a period of the "Great Crisis". This crisis lasts as long as it takes for the institutions to conform to the long-term context. The regulation of the economic system in the short term is again effective, until the next crisis. We are in such a situation at the moment with a regulation of our economies conceived within the framework of the Nation-States whereas the problems are global by nature. We will remain in crisis as long as there is no supranational regulation, the ecological crisis with global warming and the collapse of biodiversity is a good example. Such an approach can be applied to the understanding of the evolution of professional sport. We can identify stages in the development of capitalism and interpret the place of sport in this capitalist mode of production. In order to do this, four institutional forms can be considered: the wage relationship, the modalities of competition, the nature of state intervention, and how national economies are integrated into the world economy.

Sports regulation

- ***Wage relationship***

It is the set of legal and institutional conditions that govern the use of salaried labour as well as the reproduction of workers' living conditions. Many changes in this wage relationship have occurred since the end of the 19th-century which explain the evolution of professional sport: increase in the demand for sports entertainment due to the increase in leisure time and household purchasing power; creation of players' unions; recognition of players' rights; regulation of players' mobility (transfers, nationalities, age, etc.); evolution of the wage bill; protection of athletes' health, etc.

- ***Shape of competition***

The whole debate is around market structures between competition and monopoly. This debate was launched in the United States with anti-trust laws and their application or not to the monopolies of sporting leagues. The question has been revived in Europe and concerns the European Commission's competition policy as applied to sport in the following areas: broadcasting rights, television broadcasts, player transfers, sports betting, etc. The aim is to ensure that the Treaty is applied while taking into account the specific characteristics of sport.

- ***State intervention***

As a rule, professional sport is not affected by such intervention. Nevertheless, there are still some elements that raise controversies, such as the public financing of large stadiums or halls, and the participation of the State in the financing of the hosting of mega-sports events such as the Olympic Games, for example. Indeed, it is difficult to justify the State's intervention in a private sporting event.

- ***International insertion***

Professional sport has been impacted by the shift from highly regulatory nation-states to financial globalisation dominated by multinational firms. It is in such a context that the need to invent new instruments for regulating the labour market at a supranational level (player quotas, European tax harmonisation, transfer regulations, status of agents, etc.) is being discussed today. There is also the question of European financial regulation (financial fair play, club licences).

The interaction between these four institutional structures allows us to understand the emergence of provisional compromises to manage the conflicts arising from the oppositions between the different actors of the sporting world: players, club owners, sponsors, media, etc.

In short, the regulation of professional sports markets aims to find a compromise between two requirements that may be in contradiction with each other: a balanced sporting competition that guarantees the uncertainty of the result, and fair economic competition where everyone receives a fair return for their contribution to the overall product. This consensus is achieved through collective bargaining. Indeed, it is recognised today that if the market is left to operate freely, it will be difficult to achieve a competitive balance. This is why instruments for regulating the labour and sports entertainment markets are proposed: limiting the mobility of players, capping the wage bill, pooling revenues, controlling sports agents and training players.

Further information:

Jérémie Bastien, *le football professionnel européen dans un système capitaliste financiarisé en crise : une approche régulationniste des facteurs de changement institutionnel*, Thèse de sciences économiques, Université de Reims Champagne-Ardennes, 2017.

Jean-François Bourg et Jean-Jacques Gouguet, *Economie politique du sport professionnel,* Vuibert, Paris, 2007.

Robert Boyer et Yves Saillard (Dir.), *Théorie de la régulation*, L'état des savoirs, La Découverte, Paris, 2002.

Related articles: sports agents, economics of crime, competitive balance, sporting exception, transfers.

Rookie Draft: allocating new talent, balancing competition and maximising profits?

Definition and modalities

In North America, the rookie draft is a dirigiste allocation of the best talent from the minor, college or foreign leagues. Some professional leagues thus protect themselves from a freely functioning labour market by granting clubs exclusive rights to players entering the league [Leeds, von Allmen, & Matheson, 2018].

The rookie draft has two basic principles: the elimination of all competition between clubs in the same league to take a player from a pool of young players; and the selection of players ranked according to their talent by the clubs in reverse order of their rank in the previous season and/or through a random draw. The rookie draft eliminates the athletes' freedom to choose their clubs and constrains the employers' freedom in the selection of their employees.

This regulatory instrument has been implemented in five North American leagues: in American football (National Football League, NFL) since 1936 [Keefer, 2021; Blemmings, 2019]; basketball (National Basketball Association, NBA) since 1949 [Evans, Pitts and Clark, 2021]; ice hockey (National Hockey League, NHL) since 1963; baseball (Major League Baseball, MLB) since 1965 [Pifer, McLeod, Travis and Castleberry, 2020]; and football (Major League Soccer, MLS) since 2000. The complex rules of the rookie draft fall under the Collective Bargaining Agreement, which is regularly negotiated between the league, the franchise owners and the players' union. Schematically, in some leagues, the team ranked last in the previous season can draft the best new talent ranked first on the league's roster in the off-season, and so on in reverse order of ranking (NFL, MLB).

In other leagues, the rookie draft may involve a degree of risk for low-ranked franchises that do not qualify for the playoffs. A lottery aims to prevent clubs from acting as free riders by voluntarily losing at the end of the championship (without risk of relegation in a closed league), to ensure the best picks for the following season (NBA, NHL). The MLS has a special regulation that aims to keep good players in the league and protect the clubs from the competition of European clubs for recruitment.

The number of players and the number of rounds of the rookie draft varies depending on the league: 60 players in the NBA with two rounds of the rookie draft, 215 players in the NFL with seven rounds, 256 players in the NHL with seven rounds, 1,215 players in the MLB with 40 rounds. Any refusal from a player prohibits him from any activity within the league for at least one year. However, considered too rigid, this system has been relaxed with the possibility of negotiation between the clubs who can now trade their rookie draft round for another one or, with a player under contract with another team.

Objectives

The rookie draft lever is at the heart of the concerns of North American leagues - whose objective is to maximise profits. To achieve this, the preservation or restoration of competitive balance is the prerequisite for maintaining the quality and attractiveness of the sporting competition. Indeed, the absence of an open pyramid system of promotion-relegation, which is the basis of the organisation of sport in Europe, obliges North American leagues to renew the sporting talent within each team and to balance the forces present to maintain the uncertainty of the result and the interest of the public.

This allocation of talent is supposed to regulate competition between the franchises by eliminating all freedom of negotiation, permanently rebalance the competition in sporting terms by avoiding a concentration of the best players in a few teams, limit inflation in player salaries and guarantee minimum salaries for beginners.

Without the rookie draft, franchise owners of smaller clubs would not have access to new players from the league for purely financial reasons. However, it appears that the competitive balance did not change significantly after the introduction of the rookie draft in the NFL and MLB [Fort, 2003, 2011]. However, the rookie draft gives the league and the franchises a monopsonistic power for the recruitment of rookies that allows a transfer to the owners of the value created by these new players. The former monopolise the monopsony rent without having to share it with the players who are penalised by this supervised mobility - their salaries being lower with the rookie draft than if they had evolved in a market with free recruitment.

The *rookie draft* tested by behavioural economics

The psychology of decision-making in the high-stakes context of NFL rookie selection helps identify several behavioural biases [Thaler, 2018; Massey and Thaler, 2013]. Indeed, the right frequently used by teams to trade either their priority picks for other differently ranked picks, or for picks in future years, allows for an analysis of the time preferences of franchise executives.

Irrational behaviour tends to overvalue the right to pick early in the rookie draft, with early picks costing too much. Overconfidence results in recruiters overestimating their ability to rank talent between two players, their ability being less than they think. Furthermore, this overconfidence in their judgment leads recruiters to make predictions about the possible future quality of players that are too extreme. These players will be good, just not as good as the recruiters think.

From then on, when it comes to selecting coveted players ranked at the top of the rookie draft, the 'winner's curse' can operate. According to auction theory, when several people are competing for the same item, the winner is often the one who overvalues the item being sold. This is also true for the NFL, especially since recruiters tend to be certain that their competitors share their preferences. Hence the overpricing mechanism that makes the winner's curse inescapable with a price paid that is too high concerning the player's real value. Another behavioural anomaly is the present bias, where owners all want to win immediately, while there are inevitable uncertainties about the future quality of new players.

The market for rookie draft picks does not satisfy the efficient market hypothesis. If the market were efficient, the relative value of rookie draft picks, as established by the NFL's 'Charter', would be a predictor of the value added to the team by those picks. For example, the first pick would have the highest value, the second pick the second highest, and so on. But this is far from the case, with each of the second-round picks bringing more value to the team than the coveted first-round picks. Moreover, when a team has paid a lot of money for a well-placed rookie draft pick, the pressure is so great that it feels compelled to draft that player even if he is not good. The market forces do not drive the price of the rookie draft towards the real added value of these picks to the team.

On the other hand, trading a pick in the upcoming season's rookie draft for a pick in the following season's rookie draft shows that teams should prefer to forego a pick one year to be better positioned the following season. Rational behaviour would have teams loan out a second pick to get the first pick the following season, then trade that first pick for multiple better picks in the second round two years later. However, owners do not seek to optimise their strategies during the rookie draft. Instead, they go for what they think are the best picks for the season in terms of short-term athletic and financial success. However, the probability that a player selected is better than the one who will be selected right after is, over the entire NFL rookie draft, only 52%, which is not much better than a banal coin toss [Thaler, 2018].

Further information:

Benjamin Blemmings, "Economics and the National Football League", in Paul Downward, Bend Frick, Brad R. Humphreys, Tim Pawlowski, Jane E. Ruseski and Brian P. Soebbing (eds), *The SAGE Handbook of Sports Economics*, London, Sage, 2019.

Brent A. EVANS, Joshua D. PITTS and Chris CLARK, "Is the NBA Summer League Predictive of Performance for NBA Rookies ?", *Journal of Sports Economics*, vol. 22(2), 2021.

Rodney D. FORT, *Sports Economics*, First and Third Edition, Pearson, Upper Saddle River, New Jersey, 2003, 2011.

Quinn Andrew Wesley KEEFER, "Did the 2011 Change to NFL Rookie Compensation After How Sunk Costs Affect Utilization", *Journal of Sports Economics*, vol.22 (4), 2021.

Michael A. LEEDS, Peter von ALLMEN and Victor A. MATHESON, *The Economics of Sports*, 6th Edition, Routledge, Boston, 2018.

Cade MASSEY and Richard H. THALER, "The Loser's Curse: Decision Making and Market Efficiency in the National Football League Draft", *Management Science*, 59 (7), 2013.

N.David PIFER, Christopher M.MCLEOD, William J.TRAVIS and Colten R. CASTLEBERRY, "Who Should Sign a Professional Baseball Contract? Quantifying the Financial Opportunity Costs of Major League Draftees", *Journal of Sports Economics*, vol.21(7), 2020.

Richard H. THALER, *Misbehaving. Les découvertes de l'économie comportementale*, Seuil, Paris, 2018.

Related articles: competitive balance, sporting exception, North American professional sports leagues, regulation, transfers, *winner's curse*.

Salary cap: sporting or financial regulation?

Definition and modalities

The salary cap is a limit on the payroll of teams in a professional league, implemented mainly in North America. It was introduced in 1983 for the NBA, 1994 for the NFL, 1996 for the MSL and 2005 for the NHL. Other professional sports organisations also apply it in Australia (basketball, football, rugby union), England and France (rugby union) and Eurasia - Russia, Finland, China, Latvia, Belarus, Kazakhstan (ice hockey).

The salary cap is one of the features of the labour relations that is collectively negotiated between the club owners and the players' representatives. It is the amount of the league's revenue from the sporting spectacle that is distributed to the players, which is on average between 50 and 65% depending on the league and the era. By dividing this overall amount by the number of teams, we obtain a maximum and identical wage bill for each club.

If there is a disagreement over revenue sharing, a players' strike can be called and lead to a suspension of matches for a significant time (a few days, a few months, even a season or more). In this case, the owners 'lock out' their teams and temporarily lay off the players. Over half a century, there have been more than twenty lockouts in the four North American leagues concerned.

There are usually two types of salary caps. 'Hard' caps which lead, in case of non-compliance, to heavy fines (a "luxury tax"), contract cancellations, or even exclusion from the rookie draft or the league and are applied in the NFL, NHL and MLS. 'Soft' caps allow for overages and numerous exceptions, in some cases with the payment of a tax (NBA). Thus, more than two-thirds of NBA teams frequently do not respect the authorised payroll. In addition to these salary ceilings, some leagues have salary floors that can represent between 75% (NHL) and 90% of the maximum wage bill (NFL, NBA).

The various ways club owners in the NFL have circumvented the cap (rearranging contracts over time or deferring payments to stay under the cap) have softened the contract, with several franchises regularly exceeding the cap. Two selected examples from the NBA and MLS illustrate the weakening of the salary cap's regulatory power through these waivers.

The Larry Bird Exception (named after the Boston Celtics superstar) has allowed basketball clubs to sign players outside the salary cap since 1983, within a defined time limit but without financial constraints, as long as they have been playing for several years in their ranks and are therefore free agents. This is how the salary of another NBA superstar, Michael Jordan, who alone exceeded the Chicago

Bulls' salary cap by 30%, was excluded from the salary cap at the end of the 1990s, as was more than 15% of the league's workforce.

The Beckham Rule, introduced in 2007 when Los Angeles Galaxy signed David Beckham, authorises the exemption of three players' salaries from inclusion in the cap. The purpose of the rule is to give franchisees the means to attract foreign superstars and thus accelerate the sporting and commercial development of MLS through their fame and talent.

Objectives

Originally, the first salary cap designed by the NBA in 1983 was intended to restore the league's profitability, as two-thirds of the franchises were loss-making and the occupancy rate of the venues did not exceed 58% in the early 1980s. To balance the league and maintain the uncertainty of the outcome to maximise profit, competition in the labour market cannot efficiently regulate the sporting competition. Indeed, if teams are free to recruit the best players, the overbidding between them will result in the wealthiest teams monopolising the best talent. This will widen the competitiveness gap between clubs and deepen the pay gap between athletes. There will also be an increase in salaries, with the risk of bankruptcy in a business with low productivity gains due to the fixed number of players on the pitch.

Alternatively, limiting the dispersion of the wage bill can contribute to a fairly even distribution of talent. When teams are subject to both wage bill ceilings and wage bill floors at similar levels, they sensibly have the same expenses and, consequently, the same sporting potential. The purpose of the minimum wage bill is to force small clubs to strengthen each season when they might be tempted to act as free riders in the league by not recruiting or only recruiting mediocre players.

The economic and sporting consequences

The influence of the salary cap on competitive balance varies according to its rules and the way it is applied or circumvented. It is true that the possible penalty for not respecting the salary cap is often financial, which does not constitute an effective deterrent for rich clubs who prefer to pay a fine and exceed the cap.

Nevertheless, the greater the gap between payrolls (one to three on average in the NBA and one to two in the NFL), the greater the concentration of titles. The share of final victories of the five most successful clubs in the history of the championships ranges from 73% for the NBA (high predictability of the sporting result) to 46% for the NFL (high uncertainty of the sporting result).

This indicator partly reflects the degree of regulation in the league: flexible salary cap (NBA) - strong talent equalisation (NFL).

In American football, too, a larger number of clubs can win than in basketball, including those in small towns with relatively low turnovers. Where there is no payroll control, the inequalities are even greater: from one to five in MLB. Competitive balance is more affected in the baseball league, with five clubs dominating, accounting for 70% of the titles.

The signing of a superstar with a very high budget places explicit opportunity costs on the franchise. With the NFL's hard cap, it is forced to give up many of the picks it could have financed with the same budget since it can only spend the same amount as others. Because of this financial constraint, the only way to build a competitive team is to constantly make choices that pay more than they cost.

From the point of view of the overall evolution of players' salaries, and over a ten-year period (1990-1999), the NFL's hard cap was more effective (+164%) than the NBA's soft cap (+389%). And over the same period, the other two major leagues that did not have this cap experienced strong salary increases: +237% in MLB and +380% in NHL.

The distribution of individual salaries is very heterogeneous, reflecting the relative effectiveness of regulatory mechanisms, or even their absence. Ten per cent of NBA players receive 40% of all distributed salaries. Despite the collective salary cap and the introduction of individual salary caps in some leagues, a great deal of inequality of remunerations remain: from 1 to 50 for example in the NBA. This dispersion is smaller in the NFL. The MLB has the greatest inequalities in its free operation.

The results of academic research into the impact of the salary cap on all clubs in a league are contradictory [Leeds, von Allmen and Matheson, 2018; Fort, 2011; Sandy, Sloane and Rosentraub, 2004]. Some consider the salary cap to be the most effective regulatory instrument for allocating talent and balancing competition, while others do not identify a significant impact in this respect.

Yet, there is some consensus amongst sports economists that the salary cap limits salary inflation and preserves the financial health of franchises. In truth, the real purpose of the salary cap, by restricting the overbidding that always benefits players, is to organise a transfer of income from players to franchise owners, thereby maximising profits.

Towards a salary cap in Europe?

In European rugby, England (since 1999) and France (since 2010) implement a salary cap with different limits and a rule that offers a competitive advantage to the English during European cups since they can remove two players per season from the calculation of their wage bill (Marquee Player System). The result being that English clubs can bid over their salary confinements to sign top players that French teams can neither attract nor keep in their squad.

However, the transposition and generalisation of such a regulatory tool seem problematic for several reasons. At the level of the national championships, the inequalities in club turnover and therefore in the wage bill raise the question of the cap level. If the average championship wage bill were taken as the authorised threshold, this would mean, for example, that PSG would have exceeded the salary cap in 2020, just with the two salaries of Neymar and Kylian Mbappé alone, even though the French club has around 30 first-team players. With a cap in place, the Parisian club would not be able to have as much talent. This would help balance the French Ligue 1 but would reduce the club's competitiveness in European competitions.

UEFA is currently considering the feasibility of a cap to redress the imbalance in European football. Given their extreme diversity in terms of turnover, legal status, tax and social security systems - all of which distort competition - it would prove more difficult to establish and enforce a common cap on clubs participating in European cups, than for national leagues.

How can the same cap be imposed on German, English, Spanish, French or Italian clubs as on Belarusian, Estonian, Georgian, Polish or Ukrainian clubs? Financial fair play is indeed the first form of regulation that exists, but it only limits clubs' expenditure to the amount of their income, which can be very different. Another legal difficulty lies in the territory covered by UEFA (55 countries), which does not coincide with that of the European Union (27 countries). Furthermore, UEFA does not have the authority to impose a salary cap on the hundreds of clubs that do not participate in the competitions it owns. (Champions League, Europa League).

The salary cap would not be sufficient to effectively regulate European competitions. It would also be necessary to review the sharing of commercial revenues from European cups in a more egalitarian way, such as modify the conditions of access to these competitions, reform the transfer system, the setting of individual salaries, etc. In addition, such a system would require prior negotiation and agreement between the national leagues, clubs and players' unions to be applied.

However, the European Club Association (ECA), which brings together the heads of the continent's top teams (Real Madrid, Barcelona, Bayern Munich, Juventus), is hostile to any changes that would jeopardise its financial and sporting advantages, which guarantee its lasting dominance. This is all the more true given that this powerful lobby regularly threatens to leave UEFA and create a closed Super

League based on the North American model, with the interested assistance of television channels and sponsors.

Further information:

Rodney D. FORT, *Sports Economics*, Third Edition, Pearson, Upper Saddle River, New Jersey, 2011.

Michael A. LEEDS, Peter von ALLMEN and Victor A. MATHESON, *The Economics of Sports*, 6th Edition, Routledge, 2018.

Robert SANDY, Peter J. SLOANE and Mark S. ROSENTRAUB, *The Economics of Sport. An International Perspective,* Basingstoke, Palgrave Macmillan, 2004.

Related articles: club deficit, competitive balance, sporting exception, financial fair play, European professional sporting leagues, North American professional sports leagues, luxury tax, regulation, rookie draft, superstars, transfers.

CHAPTER IV – THE PROFESSIONAL SPORTS LABOUR MARKET

Multiple divisions threaten professional sport today and it appears that these difficulties are all found within the labour market. Indeed, the labour market is by far the most important market as the sporting spectacle is above all a live show. It is therefore essential to understand the functioning of this market, which presents strong specificities linked to the characteristics of the different actors involved: players, agents, owners, unions, sporting and non-sporting institutions.

Sports agents: what market power?

Definition, origin and remuneration

The sports agent is an intermediary whose mission is made necessary by the fact that the sports labour market does not directly link supply and demand. This intermediary is mandated by a party concerned by the signing of the agreement, acts on its behalf and receives a commission indexed on the price of the transaction [Brocard, Rossi and Semens, 2019]. Athletes delegate to agents the negotiation of their transfers and salaries, expect legal, tax and financial advice to optimise their investments and assets and entrust them with the sale of their image to brands and the managemnt of their social network activities. Clubs delegate some of their talent scouting and aim to minimise the cost of transactions and, seek to reduce the risk of recruitment errors because they have incomplete knowledge of the players' qualities.

Although the role of 'intermediary' has always existed, often in a hidden way, the activity of sports agents has developed in North America since the 1960s and in Europe since the 1980s [Poli, 2010]. The commercialisation of sport and the generalisation of fixed-term contracts during the 1990s led to very strong growth in the number and value of transfers. Then, from 1995 onwards, the date of the Bosman ruling by the European Court of Justice (ECJ), the removal of obstacles to the mobility of players, in accordance with the principle of the free movement of workers, further accelerated the pace of transfers. The evolution of the average annual number of international football transfers bears witness to this: a tripling between 2000 and 2010 (from 3,500 transactions to 10,000), then a doubling between 2010 and 2020 (from 10,000 to 20,000). So why should we be surprised that the number of agents in world football is well over 5,000?

Agents' remunerations are based on a percentage of the amount of the contracts they have signed on behalf of the athlete (on average from 10 to 12%). The lower the transfer, the higher the percentage of commission and vice versa. However, there is no standard commission. The 2016 transfer of Paul Pogba from Juventus to Manchester United is said to have earned his agent €27 million on a deal worth around €100 million, i.e., over 25%. Indeed, some agents have earnings comparable to the superstars whose careers they manage: Jorge Mendes' (GestiFute agency) annual earnings regularly reach €100 million, with Cristiano Ronaldo and José Mourinho amongst those under contract.

Strategic transfers requiring complex information: the lessons

The decisions of sports stakeholders regarding transfers are based on an assessment of the club's willingness to pay and the player's willingness to sign a contract. However, no standards are determining the amount of the transfer fee and the level of the salary, as negotiations are carried out by mutual agreement, except in the North American professional sports leagues with the Collective Bargaining Agreement.

By way of illustration, how can we justify the 222 million euros spent in 2017 by PSG to obtain the early termination of Neymar's contract with Barcelona and his five-year commitment to PSG? In addition to the transfer fee, on what economic model can the Brazilian footballer's annual salary of 37 million euros net be made profitable? In other words, what improvement in sporting and commercial performance can the club expect from the superstar's recruitment?

It is in this context that the information held by these actors on the positions of partners and competitors seems essential and that the imperfection of information creates a role for sports agents. For athletes, the choice of career path has a direct impact on their future career goals and their record of achievements. This is particularly true given that their career is short (6-8 years on average depending on the discipline) and uncertain (injuries, poor integration, disagreements with the coach, etc.). For the clubs, transfers have sporting stakes (competitiveness, results), accounting stakes (increase in assets on the club's balance sheet) and financial stakes (additional operating income).

Players find it difficult to determine their salary expectations because they do not know the salaries of other players and often do not know how to properly evaluate their own talent. In addition, they are unable to identify the clubs interested in their services, to know and analyse the financial health of these clubs or the quality of their management. At the same time, clubs face obstacles in identifying players who can fill their talent gap. Other important characteristics are also unknown to them: the player's condition, his ability to adapt, and his professionalism. As a result, sports agents, with their knowledge of the market and their multiple networks of relationships with players and clubs, are expected to disclose this private, hidden information to facilitate transactions.

The theoretical justification of sports agents: the analysis

Theoretically, the market is supposed to determine an equilibrium price when information is perfect, i.e., when the information concerning each party is available and known to all. In reality, the imperfections of the sports labour market necessitate intermediation to reduce the information asymmetry between athletes and club owners or managers [Brocard, Rossi and Semens, 2019]. Information asymmetry refers to a situation where one individual has more information than another about a good or service. The less informed party is disadvantaged and may refuse to enter into a contract because they distrust the other party who could use their private information for their own benefit. Mutually beneficial transactions may not be concluded because of the information asymmetry, which is a source of inefficiency.

The principal-agent models of contract theory incorporate this asymmetric information context by describing bilateral relationships that take the form of contracts between parties: one party provides services (the principal) for the other party (the agent) in return for payment. Agency theory is established on the principal-agent model. It is based on two fundamental assumptions: limited rationality and opportunism. Limited rationality assumes that individuals are not able to have complete information in all situations and circumstances. Opportunism identifies the possibility for actors to serve their self-interests, as the principal cannot fully control the agent's behaviour, abilities and loyalty.

One of the aims of contract theory is to find incentive systems, which ensure that the agent acts in the direction desired by the principal. Both parties have an interest in collaborating, but they seek to appropriate the result of this collaboration. The purpose of the model is to identify contractual clauses that maximise the ‘surplus’, i.e., the raison d'être of the contractual relationship. The adoption of a non-cooperative point of view, where only situations resulting from individuals freed from any social attachment and driven exclusively by self-interest are admitted, places this theory in the neo-classical movement [Guerrien and Gun, 2012].

A principal-agent relationship exists when a professional athlete (the principal) calls upon a sports agent (the agent) to take on a job that he or she is unwilling or unable to perform. The sports agent provides this service to the athlete by knowing the situation better than they do and by possessing ‘private information’. Both parties are aware of this information asymmetry. If the objectives of the athlete and the agent (profits, utility) diverge, two types of behaviour appear: anti-selection and moral risk. Anti-selection occurs when the agent misleads the athlete by overestimating his or her level of skill or training. The athlete may engage with an agent who is not able to provide the expected services. The athlete receives incomplete information about the salaries paid to players of comparable talent and experience. Furthermore, the agent has more knowledge of the negotiation process and market conditions than the athlete does.

Moral risk arises when the agents do not act fully in the interest of the athlete, either because the latter is less well informed than they are and cannot verify the entirety of their services; or because the contract is incomplete by not taking into account certain eventualities. For example, an agent may quickly reach an agreement with a club when a less profitable solution for the agent would have been favourable to the athlete, who is harmed by this opportunistic behaviour.

Agency theory proposes two types of solutions to reduce these failures as much as possible. The implementation of monitoring mechanisms can help to provide information on the knowledge, skills, behaviour, efforts and performance of agents to reduce the information asymmetry. Performance-based contracts can be an effective deterrent by using a system that makes the agent's remuneration dependent on the results obtained by the agent, whose commission increases in line with the athlete's performance.

The abuses

The imperfections of information are all reasons for the existence, legitimate from a theoretical point of view, and debatable from a factual point of view, of the function of sports agents in the transfer market. The question is whether the growing weight of sports agents in transfers does not give them excessive market power. The more opaque the market, the more favourable the agent’s position [Gouguet and Primault, 2006].

The reduction of information asymmetry by sports agents may not be satisfactory for clubs and players alike: unjustified additional costs for transfer fees paid by clubs; considerable amounts of money in commissions paid to agents (800 million euros annually for European football, 1.6 billion euros for all team sport worldwide); alteration of the fairness and competitive balance of competitions by excessive rotation of players and concentration of the best talents in a few clubs; endangering the financial management of clubs; exacerbating conflict situations within clubs to destabilise players under contract in order to provoke transfers, and thus secure a new commission, without necessarily prioritising the interests of the player; conflicts of interest with the double mandate of player/club or the mandate of players engaged in clubs that the agents own; canvassing of competing clubs to raise the stakes; trafficking in young players; kickbacks; nominees; tax fraud; false invoices; illegal work; false passports; money laundering; capital evasion into tax havens; match-fixing and a lack of transparency on the real beneficiaries of commissions.

Essential market regulation

Sports agents, who are supposed to improve the functioning of the market, are thus the source of perverse effects. The International context tends to deregulate the status of sports agents, with the Fédération Internationale de Football Association (FIFA) having decided to open up the agent market on the 1st of April 2015, by removing barriers to entry, in particular, the requirement to obtain a FIFA licence. The aim is to encourage hidden agents to declare themselves and thus make the financial flows between clubs, agents and players more transparent. The international body has left each national federation or country free to decide whether or not to regulate the profession.

An initial assessment drawn up in November 2017 by the main stakeholders in European football (European Football Association, UEFA, players' union, leagues and clubs) stigmatises the negative effects of this deregulation: a sharp increase in the number of intermediaries in all countries; amplification of player mobility; unbridled search for ever younger players; lack of improvement in the transparency of financial transactions; decline in the average quality of services provided to clubs and players; lack of a slowdown in the inflation of compensation paid to agents and a disproportionate growth of commissions compared to services rendered.

Because of the extent of such failures, FIFA has decided to regulate the activity of agents once again, starting with the 2020/2021 season, with the re-establishment of a licence issued by each national federation; a limit on their commissions (10% of the transfer fee for the agent of the selling club, 6% of the player's remuneration, 3% of the remuneration for the agent of the buying club); a compulsory transit of agent's commissions by a clearinghouse managed by FIFA; a limit on international loans of players by a club to foreign clubs to eight in 2020/21021, seven in 2021/2022, and six in 2022/2023.

This critical assessment shows how far the actual practices of sports agents are from the theoretical justification for their role, namely the reduction of information asymmetries, which are the source of market imperfections! More radical reforms of the talent market will have to be envisaged to properly remedy these abuses: limiting the number of transfers, limiting the number of players under contract, regulating the system of player loans, supervising agents' commissions and even abolishing transfers themselves.

For more information:

Jean-François BROCARD, Giambattista ROSSI et Anna SEMENS, *Agents sportifs et marchés du travail*, Juriséditions, Dalloz, Paris, 2019.

Jean-Jacques GOUGUET et Didier PRIMAULT, « Les agents dans le sport professionnel : analyse économique ». *Revue Juridique et Economique du Sport*, n°81, décembre, 2006.

Bernard GUERRIEN et Ozgur GUN, *Dictionnaire d'analyse économique*, 4ème édition, collection Grands Repères, La Découverte, Paris, 2012.

Raffaele POLI, *Le marché des footballeurs. Réseaux et circuits dans l'économie globale*, CIES, Peter Lang, Berne, 2010.

Related articles: Bosman ruling, economics of crime, competitive balance, regulation, rookie draft, superstars, third party ownership, transfers.

Bosman ruling: market deregulation and competition destabilisation?

Content and legal scope

The Bosman ruling was delivered by the ECJ on the 15th of December 1995, after five years of litigation with national and European football governing bodies and the Belgian courts. Jean-Marc Bosman, a Belgian player, opposed his club RFC Liège, when it refused to transfer him to the French club USL Dunkerque, in 1990. Bosman contested the possibility for the Belgian club to demand a transfer fee when his contract had expired, as well as the existence of quotas limiting the number of foreign players at a club, who are EU nationals, to three.

Before the ECJ's ruling in 1995, it was customary for clubs to require the payment of a transfer fee when a player left for a new club, even though the player was no longer bound by an employment contract. Any transfer was therefore subject to the agreement of the home club. In addition, the national associations and UEFA imposed quotas on the number of foreign players per team. As a result, clubs relied mainly on training academies and, exceptionally, on certain players with a strong international reputation.

These rules, which were very favourable to the clubs, tended to stabilise both the staff and the coaches' game plans, guarantee a certain return on investment in the training of young people, and keep the remuneration of footballers at relatively moderate levels. The ECJ's challenge to these principles will reverse the balance of power between clubs and players by giving the latter unprecedented bargaining power.

The ECJ ruling includes two decisions:

1. players at the end of their contract are free to sign for the club of their choice without their home club being able to claim a transfer fee in accordance with Article 39 of the Treaty of Rome prohibiting any restriction on the free movement of workers.
2. the regulations introducing nationality quotas in football are contrary to Article 48 of the Treaty of Rome on the free movement of nationals of a Member State wishing to take up paid employment in another Member State. As a result, the European Union has demanded that football's governing bodies amend the transfer regulations to remove these two obstacles to the community principle of free movement.

Moreover, the Bosman case law was subsequently extended to all sports with the abolition of player quotas based on nationality for non-EU nationals ("Malaja" ruling, 30 December 2002 by the French

Conseil d'Etat) and to those from countries that have concluded a non-discrimination agreement with the European Union: Russia, countries in the African and Caribbean-Pacific zones as well as the four Mercosur countries - Argentina, Brazil, Paraguay, Uruguay - (ECJ judgments "Kolpak", 8 May 2003 and "Simutenkov", 12 April 2005). In fact, all professional athletes - not only footballers - can move without hindrance in more than one hundred and thirty countries in the world (apart from North America, South America and Asia). The assimilation of professional sport into an economic activity subject to liberal EU rules has had a considerable impact on European sport, especially football.

Economic consequences

The Bosman ruling significantly weakened the quota system previously in force, while the development of football, with the arrival of pay-tv channels following the deregulation of the audiovisual markets, enabled most clubs to increase their revenue and expand their recruitment areas. These legal and economic factors have led to a surge in demand from clubs and inflation in the number of transactions. The wealthiest clubs try to attract the best players regardless of their origin.

For example, Zinedine Zidane left Juventus for Real Madrid in 1999 for €78 million, an unheard-of amount at the time, whereas he had been transferred from Bordeaux to Turin in 1994 for just €3.5 million. However, the record termination fee comes from the 2017 transfer of Neymar from Barcelona to PSG for €222 million. Overall, transfer spending rose from €403 million in 1994-55 to €1.7 billion in 1999-2000, then to €3 billion in 2010-11 and to €8 billion in 2017-18, a 20-fold increase from pre-Bosman to post-Bosman.

Moreover, the liberal functioning of the players' market has been accompanied by a speculative practice by clubs wishing to make substantial capital gains from the increasing number of transfers. Most clubs are indeed counting on a resale before the end of the contract, within a fairly short time, either to make up deficits to meet certain accounting obligations, or more rarely to make a profit and distribute dividends to shareholders. The frequent signing of long-term contracts is a method of circumventing the Bosman ruling, as the original deadline is never reached since the transfer price depends on the number of years of the contract remaining.

The free movement of footballers has given rise to a sharp increase in demand from clubs, which has contributed to inflation in the remuneration demanded by players, who are more frequently solicited for their services than in the past and take advantage of transfers to negotiate salary increases. Indeed, if a player wants to leave his club before the end of his contract, he has the means through pressure to obtain his agreement. By playing poorly, he weakens the competitive potential of his team and reduces the value of the early termination fee that his club will receive. This balance of power is almost always concluded in favour of the athletes, helped by their agents, who are paid in the form of commissions calculated as a percentage of the transactions. Between 1997 and 2007, footballers' salaries rose by 235% in the five main leagues (Germany, England, Spain, France and Italy).

For superstars, the increase in income has accelerated exponentially because they alone, in a position of a virtual monopoly of the supply of their talent, can bring into play the competition between the big clubs that have benefited from the considerable increase in TV rights. As a result, the number of footballers included in the world's 50 highest earners is increasing. In 2021, it included ten players - three of them in the top ten, with Lionel Messi (107 million euros) in second place, Cristiano Ronaldo (99 million euros) in third place and Neymar (78 million euros) in sixth place - who were not included at all in the previous ranking.

The deregulation of professional sport has also resulted in an excessive concentration of economic resources in a small number of leagues and clubs, as three indicators show: 90% of salary increases, 85% of transfer fees and 75% of profits in this area are attributable to the five main European leagues (2017-2018 season) [UEFA, 2020]. Yet, the financialisation of professional sport alters the singularity of competition. The promotion of the uncertainty of the result - a fundamental sporting principle - likely requires strong regulation to balance the economic resources between the clubs, and thus strengthen their competitiveness.

The alignment of professional sport with the rules of economic activity has accelerated the transformation of the athlete into a financial asset, characterised by the potential to generate income streams (gate receipts, by-products) for which the acquisition date and the resale date must be optimised. Moreover, this speculative logic amplifies the change in the shareholding of clubs, with an increase in the number of takeovers by investors from outside of sport who orient their governance towards short-term policies to the detriment of the construction of medium and long-term development projects.

Sporting consequences

The globalisation of the footballers' labour market is a well-established process. The number of player transfers between clubs not belonging to the same countries increased tenfold between 1995 and 2018, reaching 16,533 transactions in 2018 [Drut, 2019]. The average share of foreign players in the squads of the five main European leagues has steadily increased: from 18.6% in 1995-1996 (the last season before the Bosman ruling took effect) to 46.7% in 2015-2016 (with consequent differences between France, 33.9%, and England, 66.4%) [CIES, 2016].

Similarly, the migration of sportsmen and women from developing to developed countries has increased, as have the requests for the naturalisation of top athletes. This phenomenon, activated by sports agents, reflects a real 'muscle drain' from the South to the North, which considerably impoverishes the potential and competitiveness of the countries of origin of these flows. The average age of the first international migration of footballers from the five main European leagues has steadily decreased from 24.3 years in 1980 to 21.1 years in 2015 as a result of the increasing recruitment of underage players often from developing countries [CIES, 2016].

Post-Bosman players appear to be more productive than those who played during the pre-Bosman era given the increased competition within the workforce [see Radoman, 2017 for a study of the impact of the Bosman ruling in the English Premier League]. The increasing mobility of footballers undermines the stability of teams' squads, as well as the building of a playing style. On average, a player stays with the same club for two years, a period that is decreasing every year. Very few players reach the end of their contract, as their clubs push them to renew their contracts regularly to secure a transfer fee. Moreover, mobility is occurring earlier and earlier in players' careers. The continuing decline in the proportion of club-developed footballers reflects this process.

Does the access of clubs to the labour market facilitated by the Bosman case law, contribute to a greater concentration of talent in a small number of rich clubs putting competitive balance in danger? Alternatively, do labour market regulations, by hindering the mobility of professional players, limit this concentration of the best players and preserve competitive balance?

For some sports economists, these obstacles to the free movement of players cannot have any effect on the distribution of talent and do not balance out the competition, contrary to their intended purpose. Big clubs will always attract talent. It is beneficial for small teams to sell their talent if the financial proceeds of such sales are greater than the loss of revenue or losses caused by those same teams' subsequent poor sporting results. And it is also profitable for the big clubs to buy the best talent if the gains obtained are greater than the transfer fee to be paid. The only effect of a constraint on the mobility of players would be to change the distribution of the rent to the benefit of the club owners and to the detriment of the players whose reduced bargaining power is accompanied by a comparably low level of remuneration.

For European clubs, which are supposed to maximise sporting gains, it can be said that the post-Bosman deregulation of the sports labour and sporting-spectacle markets has had an impact on competitive balance by increasing the economic and sporting segmentation of the leagues [Bourg, 1998]. The big clubs belonging to the five main leagues have thus been able to capture the major part of the commercial revenues of their championships and the Champions League due to the choice of pay-tv to broadcast the matches of the most prestigious teams as a priority in order to benefit from the best audiences. This development has gradually led to the disappearance within the European elite of many development clubs that are financially unable to retain their talent (Glasgow Celtic, FC Porto, RSC Anderlecht, AS Saint Etienne, FC Nantes, etc.).

There is a correlation between the concentration of financial means and the concentration of sporting gains, which can signify an economic determination of victories. A dozen or so clubs regularly win their national competitions, take part in the final stages of the lucrative Champions League every season and have budgets in excess of 600 million euros (Real Madrid, F.C Barcelona, Liverpool, Manchester United, Manchester City, Juventus Turin, Bayern Munich, PSG, etc.). Now, at the start of each season, the uncertainty of results is limited to a few questions. In Spain, who will win the title, Barcelona or Real Madrid? In Germany, Italy and France, who will finish second to Bayern Munich, Juventus and PSG respectively? In the Champions League, will there be an unexpected club in the quarterfinals to challenge the clubs that regularly compete at this stage of the competition?

The deregulation of transfers has also had a favourable effect on external recruitment to the detriment of in-house training. This trend is aggravated by the plethora of foreign players recruited - commercially more interesting to value before a transfer - at the expense of local or national players. The pool of national teams is thus impoverished by the limited access of eligible players to starting positions at their clubs. On average, football teams in Europe have only two to three homegrown players out of the starting eleven.

Lessons and perspectives

The liberalisation of the sporting market from 1995 onwards is all the more important as professional sport is a highly skilled labour industry. The mobility of players, no longer regulated by a restrictive system, weakens the budgetary situation of professional clubs increasingly dependent on the balance of transfers (positive or negative balance of the total transfer fees received and the total transfer fees paid) and on the uncontrolled evolution of the clubs' wage bill, which is increasing rapidly and represents two-thirds of their operating costs.

The massive influx of capital from new club owners (oligarchs, billionaires, investment funds, state sovereign wealth funds, etc.), eager to win sports titles and/or make short-term profits, destabilises the transfer market, as other clubs are forced to strengthen, and go into debt, just to remain competitive. The free movement of footballers negatively affects the overall quality of European leagues by unbalancing national leagues and diminishing their interest. The consistency of the trends observed suggests that a real change is taking place in European top-level football. The big question remains is how far this process can go without jeopardising the attractiveness of the competitions and without undermining the credibility of the sport!

Further information:

Jean-François Bourg, « Dualisme et rapport salarial dans sport professionnel », dans Jean-François Bourg et Jean-Jacques Gouguet, *Analyse économique du sport*, PUF, Paris, 1998.

Centre international d'étude du sport, *Rapport mensuel de l'Observatoire du football*, CIES, Neuchâtel, n°12, février 2016.

Bastien Drut, *Mercato. L'économie du football au XXIème siècle*, 2ème édition, Editions Bréal, Paris, 2019.

Jean-Jacques Gouguet (dir), *Le sport professionnel après l'arrêt Bosman : une analyse économique internationale*, Pulim-AIES-IASE, Limoges, 2004.

Mihailo Radoman, "Labor Market Implications of Institutional Changes in European Football: The Bosman Ruling and Its Effect on Productivity and Career Duration of Players", *Journal of Sports Economics*, vol.18 (7), 2017.

UEFA, *Panorama du football interclubs européen. Rapport de benchmarking sur la procédure d'octroi de licences aux clubs*, Union européenne de football association, Nyon, janvier 2020.

Related articles: sports agents, club deficit, competitive balance, financial fair play, club owners, regulation, rookie draft, salary cap, superstars, third party ownership.

Segmentation: why is the professional sports job market so highly segmented?

Definition

Generally speaking, contemporary labour markets are far removed from the theoretical presentation of them in economics textbooks, with in particular the classic hypotheses on the atomicity of supply, its homogeneity, the perfection of information, the rationality of agents, etc. Observation of the real functioning of the labour market differs considerably from this situation of pure and perfect competition, which constitutes an ideal that does not exist in reality but which has a normative virtue. If the conditions of pure and perfect competition were respected, the free functioning of the market, which consists in letting agents pursue their self-interests, would lead to the achievement of the general interest, i.e., the optimum of the market.

The real labour market is far from obeying these conditions of pure and perfect competition and is often characterised by information asymmetry; homogeneity of the product exchanged (labour) does not exist and there is not necessarily substitutability between workers. The atomicity of labour supply or demand is rarely effective in modern markets. These imperfections in the labour market are particularly pronounced in the sports labour market: many actors are in a position of market power (clubs, players, media); information asymmetry exists for major elements of the economic model (transfers, salaries, commissions); some categories of players are not interchangeable (superstars); irrationality characterises the behaviour of many sports actors who are more driven by passion than by reason. This is why, beyond the theories of pure and perfect competition, it is better to turn to the theories of segmentation to better understand the real functioning of the sports labour market.

Market segmentation means that we are a long way from a single market with supply and demand following the traditional hypotheses. In reality, there are several market segments, revealing a great deal of heterogeneity in supply. For the first theory of segmentation, the labour market is divided into two segments:

- the primary sector concentrates the most privileged jobs: high salaries, stability, career prospects, good social protection, etc.
- the secondary sector has some very obvious characteristics: low wages, job insecurity, poor social security coverage, few career prospects, etc. Moreover, in this

secondary sector, employees are condemned to remain there with very little mobility compared to the primary sector.

The important thing to remember is that these two segments of the labour market obey radically different strategies on the part of firms. The primary segment would be the work of leaders who need a reliable, high-level workforce and who are therefore prepared to set up a kind of internal market to appropriate and retain such employees. The secondary segment would obey more the rules of the flexibility of a pure and perfect competition on an external market. In addition to this explanation in terms of corporate strategy, there is also the insider/outsider model on the employee side, which analyses the power that certain workers acquire through their position in the market. These two types of analysis will be useful for understanding the segmenting of the sports labour market, of which we present two illustrations with professional players and their agents.

The labour market for professional footballers

- ***Primary superstar market***

This market has an almost monopolistic structure. Indeed, as superstars are not substitutable, and by definition are rare, the adjustment between supply and demand is made through prices. This makes it possible to understand the levels of salaries and transfers, which only reflect a single supply in the face of multiple clubs eager to acquire exceptional sporting talent. The only limit to the supply of superstars is the financial capacity of the interested clubs. Very often these clubs go into debt to acquire this sporting talent and will experience financial problems if the sporting results are not there. It is this primary market that is largely responsible for the critical financial situation of many European football clubs. The consequences of a lack of regulation of the labour market or mechanisms for the financial control of clubs are therefore understandable. It is in this perspective that the introduction of financial fair play at the European level is indispensable if we want to avoid the risk of a financial collapse of European football.

- ***Lower primary market***

This market has an oligopolistic structure. It is made up of good players with experience but who do not have the status of superstars. Nevertheless, they are essential elements of a team's spine. In this segment, there is a relative scarcity of supply in the face of demand from many clubs, i.e., an oligopolistic structure. As in the case of the upper primary market, the adjustment between supply and demand is made through prices. This market is therefore subject to the risk of financial abuses and speculative bubbles, hence the increase in salaries and transfers.

- ***A secondary market for standard players***

This market is an oligopsony: a very large number of suppliers (the players) facing a more limited number of demanders (the clubs). In this market, players are substitutable, unlike superstars. The adjustment between supply and demand is therefore no longer made by the price but by quantity. In contrast to the scarcity constraint of superstars, which increased prices, the adjustment by quantities reduces wages and increases the precariousness of these substitutable and abundant players: unemployment, unqualification, and career end. This is closer to an ordinary labour market with a confrontation of supply and demand rather than to the advantage of the clubs' demand.

Intermediation market

The strong segmentation of the sports employment market (superstars and others) thus leads to a strong segmentation of the sports representation market. It can be seen that the more the agent works on the star market, the greater 'his' market share and the more he will work internationally. On this basis, three types of agents can be identified:

- ***First-class***

The agent in this category works almost exclusively for stars. He appears to be the essential agent for a player wishing to reach a certain level of notoriety. The role of reputable agents must therefore be better understood and determine whether or not they are the cause of an increase in the dualisation of the labour market and thus of a deterioration in competitive balance. Smaller leagues can no longer retain their stars and the big leagues compete for them, thus contributing to the inflation of speculative bubbles in the salaries and transfers of these stars.

- ***Intermediate class***

The players this agent represents are mostly positioned on the secondary market, but he has contacts in the international markets. In this lower primary segment, as in the case of the upper primary market, the role of the agents is decisive in these transactions.

- ***The lower class***

This agent only represents a few players, works alone and representation is not his main job, his legal skills are limited and his networks are restricted to national markets. In this secondary segment, unlike the previous segments, the action of agents is certainly less powerful insofar as these agents who manage this type of player are not reputable. It is therefore not at this level that the risks of imbalance are played out. On the contrary, there should be regulation in favour of defending the rights of players who are not in a favourable situation to negotiate.

To sum up, there is a strong segmentation of the European football labour market and the main risks of abuses are concerning the primary segment. Since the Bosman ruling and the liberalisation of the labour market, there has been a profound segmentation of the market for players, agents and the sporting spectacle in general. Given the centrality of the labour market in the overall governance of the sporting system, the regulation of such a market is at the heart of the preoccupation of sports economists.

Further information:

Jean-François BOURG, « Les très hauts revenus des superstars du sport », *Revue d'Economie Politique*, Vol. 118, n°3, 2008.

Jean-François BROCARD, Giambattista ROSSI et Anna SEMENS, *Agents sportifs et marché du travail*, Jurisport, Dalloz, Paris, 2019.

Jean-Jacques GOUGUET (Dir.), *Le sport après l'Arrêt Bosman. Une analyse internationale,* PULIM, Limoges, 2005.

Anne PERROT, *les nouvelles théories du marché du travail,* Repères, La Découverte, Paris, 1992.

Related articles: sports agents, economics of crime, competitive balance, regulation, transfers.

Superstars: why does the winner take all?

Economic literature describes the superstar phenomenon as a situation in which a small number of individuals enjoy significant income and capture dominant market shares in their business. Theoretical analysis identifies the markets in which the superstar phenomenon appears in different ways. The empirical approach sheds light on the sources of remuneration heterogeneity [Bourg, 2008].

The characteristics of working in the sporting spectacle

Professional sport is part of the celebrity economy and the entertainment industry. Several stylised facts specify the market for sports fame. Talent is the main vector of fame in sport because it is measurable, at least in part. Indeed, sporting talent can be objectified by the ranking, the score, the victory, the defeat, as well as with a multitude of indicators isolating the contribution of each player in team sport: playing time, number of goals or points, counters or interceptions, distance covered, etc.

Professional sport operates according to a worker's power model in which almost all resources are allocated to the primary producers, i.e., the athletes themselves, who have negotiating power over the owners [Demazière, 2016]. This is because the 'value' of a team is created essentially by the athletes, whose talent and quality of performance largely determine the sporting and financial results.

Professional sport is neither exclusively, nor primarily, about creating shareholder value. Admittedly, the legal and economic differences between the two main organisational models (Europe and North America) make it difficult to say. Nevertheless, since competition is the very essence of top-level sport, priority is given to recruiting talent in an attempt to win. Hence the bidding war to attract the best, who can 'name their price' because their price is the result of competition between the clubs at the top of the sporting and financial hierarchy.

Revenue from the sporting spectacle and therefore the income of athletes comes mainly from direct and indirect revenue from immaterial production: televised sports image rights, which are converted into audiences then sold to sponsors, TV broadcasting rights, and the marketing value of the international image of sportsmen and women for brands.

It is a well-known fact that on average, and generally, talented people earn more than less talented people. A good plumber earns more than a mediocre plumber. However, the best plumbers in the world do not earn the salaries of the best athletes. Gregory Mankiw and Mark Taylor [2019] explain these differences by two specificities of the markets in which sports champions sell their services: every consumer wants to enjoy the goods offered by the best producer; the goods are produced with a technology that allows the best producer to provide its services to every consumer at a low price.

This is how Cristiano Ronaldo - a five-time winner of the world's best footballer award and winner of 5 Champions Leagues - can show his exceptional qualities to his millions of fans simultaneously. Watching two televised matches of players half as talented as Ronaldo is not a satisfactory replacement. This has considerable consequences for his remuneration: around 100 million euros in income each year, 40% of which comes from advertising contracts with Nike, Altice, Herbalife, Tag Heuer, KFC, Fly Emirates, American Tourister and Samsung including his own brand, CR7. In contrast, these superstar effects cannot work for plumbers. All things being equal, everyone prefers to hire the best plumber, but he can only offer his services to a limited number of customers.

The superstar model

The American economist Sherwin Rosen [1981] has shown that the use of fame, in the context of mass production and global media coverage, has four essential characteristics: income differentials are much higher than talent differentials; the value of fame extends beyond the initial field of competence; the advantages obtained are subject to self-reinforcing phenomena; technological progress and globalisation enlarge the size of the market for the most successful players.

For Rosen, stardom arises in markets characterised by imperfect substitution between suppliers and the possibility of joint consumption. According to Rosen's model, there is a direct relationship between the remuneration of talent and the size of its market, which are more important the more talented the suppliers are perceived to be. There are, therefore, two fundamental aspects to these models of production and consumption.

An imperfect substitutability

The imperfect substitutability between providers of certain services has consequences for the distribution of income and the market share captured by superstars. Less talented providers are not substitutable for very talented ones, who are rare and in a quasi-monopoly position. The lack or insufficiency of talent cannot be compensated for by a greater number of suppliers. On the contrary, in some extreme situations, the market may be characterised by a natural monopoly of the superstar in his or her discipline: see the examples of Michael Jordan (basketball), Michael Schumacher (Formula 1), Zinedine Zidane (football), Tiger Woods (golf), etc. The preferences of employers and consumers for superstars explain why small differences in talent - observable by all – lead to considerable differences in remuneration.

Economies of scale

The economies of scale in the joint consumption of certain services, thanks to audiovisual technology, multiply the impact of superstars. The production costs of a football match broadcast worldwide are fixed and do not depend on the number of viewers. The television audience for the World Cup final is close to 1 billion viewers in more than 200 countries, while the stadium can only hold 100,000 spectators. The digitalisation of the sporting spectacle also allows superstars to have a huge and captive audience of followers on social networks. Cristiano Ronaldo is the most followed personality in the world, all sectors combined, with more than 500 million followers on Instagram, Facebook and Twitter.

The unlimited growth of the audience and fame of the most talented, as well as the existence of economies of scale, help to explain the very high earnings of superstars. From 1991 to 2021, the peak period for the development of this new economy of televised sport, the cumulative amount of the world's ten largest sportsmen's incomes rose from 105 million euros, in current terms, in 1991 to 336 million in 2006, then to 867 million in 2021 (source: Forbes). In 2020-2021, despite the Covid-19 pandemic leading to a decrease in the revenues of sports organisers (shortened season, banning of spectators from stadiums) and a decrease in the salaries of sportsmen and women (reductions of 10 to 20% on average), the revenues of the ten best-paid athletes in the world have increased by 28% compared to the previous year; the increase in their extra-sporting earnings more than compensates their decrease in salary.

Only superstars have the capacity to capture the largest share of the income from this technology-driven market expansion for the most talented. The change in the scale of markets also leads to a change in the scale of remuneration. The winner-take-all theory of Robert Frank and Philip Cook [1991] demonstrates the existence of a hyper-concentration of income and a durable hyper-concentration, with the winner taking a disproportionate share of the total income, all or almost all, consistently over a long period. This double phenomenon can be explained by the growing media value of superstars resulting in demand from fans by the phenomenon of infatuation, to the detriment of the less talented, less televised and less charismatic athletes. The best tennis or golf players, for example, qualify for the final stages of their tournaments and thus showcase their talent for much longer and more frequently.

The superstar effect

Work based on Rosen's theoretical model has highlighted the links between the media coverage of superstars and their ability to attract the public. The concentration of consumption on a few individuals who are recognised as talented and offered recognition is based on the consumer's preference for notoriety. Verifiable talent acts as a signal of quality. Reputation is built up through a series of performances, but also through the media, which issue rankings ("Sportsman of the Year", "Golden Ball", "Best centre forward of the World Cup", etc.). This further accentuates the hierarchy of athletes' ratings, widens the natural market of the superstar and increases his remuneration.

Reputational capital confers on its holder a quasi-rent (the surplus linked to the superstars' advantageous position). This is especially true since the pleasure or utility of consuming the superstars' services escapes the law of diminishing marginal utility and is cumulative. Instead of causing a gradual saturation, consumption creates an addiction that leads to a self-reinforcing phenomenon of stardom. For his community of followers, Cristiano Ronaldo has an image that goes beyond football and sport. He falls under the domain of celebrity with his exploits, his looks and the values associated with him: prestige, luxury, success and hard work.

The superstar's employer (the club, the organiser, the sponsor), on the other hand, seeks to maximise its sporting and financial gains by increasing its market opportunities without a corresponding increase in production costs. Advances in technology allow the market for the superstar and his employer to expand. The difference in remuneration between football superstars and merely good players can be explained by the calculation of the clubs that combine the considerable marginal advantage that the superstar can represent with what they can pay and what their competitors are equally willing to pay.

Therefore is it better to pay the best centre forward at the moment - scoring 50 goals a season and with a charismatic image - €60 million a year, or a good striker - capable of scoring 50% fewer goals and not well known - €10 million? Depending on the club's ambitions and resources, the answer will be different. But, there are only about ten teams in Europe who can choose the first option. The case of Ronaldo illustrates this dilemma. With an average of over 50 goals per season, he costs more per goal scored (€1.2m) than a second choice who scores 25 goals (€400,000). But the clubs that have successively bought Ronaldo (Manchester United, Real Madrid, Juventus) have compared the marginal benefit of each additional potential goal (better chances of qualifying for and winning the

Champions League, increased TV and commercial revenues) and have adjusted their salary proposals accordingly.

Numerous economists have established a direct relationship between the level of demand for superstars and their power of attraction [Grimshaw and Larson, 2021; Humphreys and Johnson, 2020]. Under Michael Jordan, the Chicago Bulls not only won back-to-back NBA titles but also tripled their attendance and enjoyed a $25.5 million increase in annual revenue. In 1997 to 98 alone, Jordan's total value to the Chicago Bulls was estimated at $40 million, while his salary was less than $30 million. This superstar effect was also reflected in Zinedine Zidane's impact on Real Madrid's revenue of between 42 and 54.5 million euros per season from 2001 to 2006. Given Zidane's total cost per season to the club (€36 million in transfer fees, salary and bonuses), Zidane's annual return to the team was between €6 million and €18.5 million.

All econometric tests of the superstar's impact on demand have been positive. This is consistent with the idea that the substitutability of products in renowned markets decreases with the talent they incorporate, as consumers demand their superstars who become a signal of the ex-ante quality of an event or product. This is why sponsors are keen to associate their brands with the image of superstars, who alone have visibility, audience, popularity and the power of influence. Forbes calculated that in 2015-2016, Cristiano Ronaldo generated 165 million euros of added value for his business partners simply through his activity on social networks alone.

Lessons and perspectives

Superstar theory improves understanding of the formation of very high earners in sport. The talent gaps were identical, a priori, in 1991 and 2021. However, in three decades, superstar incomes have increased exponentially and the gaps have also widened. Multiple sources of remuneration heterogeneity have been identified: differences in talent; how these gaps are valued at a given time; the very imperfect substitutability between sportsmen and women; the magnification effect of these talents and the increase in the size of the markets through television and social networks; economies of scale in the joint consumption of certain sports services and, the market power of superstars.

One avenue of research could put into perspective the role of institutions on the level and hierarchy of superstar earnings. Institutional arrangements are justified by the need to regulate sports markets to preserve the balance of competition and the uncertainty of outcome. In doing so, they influence the economic outcomes of leagues and clubs. Labour markets operate according to different rules in North America, which is highly regulated (rookie draft, salary cap, luxury tax, collective bargaining) and in Europe, which is deregulated (free movement, Bosman ruling). The same is true of the North American and European entertainment markets: closed leagues/open leagues; maximisation of financial gains/ maximisation of sports gains; high cartel power of the league/low cartel power of the league; and strong mutualisation of commercial revenues/low mutualisation of commercial revenues.

Thus, it would be useful to measure and compare the impact of the imperfections of these markets on the amount and differences in remuneration. It would also be interesting to explain the apparent paradox of a majority representation of North American professionals in team sports leagues (basketball, American football, baseball, ice hockey, soccer) in the annual ranking of the 50 highest sports incomes in the world. This is even though the labour markets in which these athletes sell their services are theoretically strictly regulated, unlike the deregulated labour markets of European athletes, who are much less well represented in this ranking. The demographic and economic size of the North American market, the efficient organisation of the major leagues in terms of sports business, their market value on an international scale, the competition between the major networks to buy television broadcasting rights and the advertising strategy of the large American firms betting on sport may account for this over-representation of North American sportsmen and women amongst the highest earners.

The share of North American athletes has indeed been decreasing steadily and noticeably in the Forbes Top 50 over recent decades: on average, from 35 to 40 during the 1990s, then around 30 during the 2000s, then 25 during the 2010s. Is this the result of more effective wage regulation in North America? The origin of this relative weakening seems to be the much faster increase in the income of superstars in European football than in North America (an average of eight footballers were in the Top 50 at the end of the 2010s compared with one or two thirty years earlier).

The deregulation of the post-Bosman era (1995) and the fierce competition between TV channels to buy and broadcast football have accelerated transfers and encouraged the top clubs to outbid each other in order to recruit superstars, a bidding process fuelled by the strong, steady and lasting growth of their TV and sponsorship revenues. Football superstars have thus benefited from the inflationist media coverage of this sport, which is the most-watched sporting spectacle in the world. In the early 2020s, Cristiano Ronaldo, Leo Messi and Neymar were at the top of a hierarchy from which footballers were previously excluded. This development illustrates and confirms the superstar effect, which is working in their favour more effectively thanks to audiovisual and digital technology, as well as the new deregulated and globalised football economy.

Further information:

Jean-François Bourg, « Les très hauts revenus des *superstars* du sport. Un état des approches théoriques et empiriques », *Revue d'Economie Politique*, vol 118, n°3, 2008.

Didier Demazière, « Quel est le prix d'un footballeur ? », *The Conversation*, 10 juin 2016.

Antoine Feuillet, Nicolas Scelles et Christophe Durand, « Répartition des revenus dans les sports professionnels ; un secteur où les Superstars prennent tout ? Le cas du tennis et du golf masculin », *Revue Française de Gestion*, octobre 2018.

Robert H Frank and Philip J Cook, "Winner-Take-All Markets", *Paper in Political Economy*, London on Department of Economics, University of Western Ontario, 1991.

Scott D. Grimshaw and Jeffrey S. Larson, "Effect of Star Power on NBA All-Star Game TV Audience", *Journal of Sports Economics*, vol.22(2), 2021.

Brad R. Humphreys and Candon Johnson, "The Effect of Superstars on Game Attendance: Evidence From the NBA", *Journal of Sports Economics*, vol.21(2), 2020

N. Gregory Mankiw and Mark P. Taylor, *Principes de l'économie*, De Boeck, Bruxelles, 2019.

Sherwin Rosen S, "The Economics of Superstars", *American Economic Review*, vol.71, n°5, 1981.

Related articles: sports agents, Bosman ruling, transfers.

Tournament theory: can we guarantee an athlete's best performance?

Principles

For labour economists, the employer-employee contract seems to escape more and more from market rules and is being replaced by organisational doctrines. A firm is now seen as an organisation in which relations between employers and employees are marked by the private possession of informational rents and by strategic interactions. In reality, the adjustment and formation of wages are not the results of a trial-and-error mechanism between labour demand and supply, but incentive mechanisms.

Tournament theory, developed by Edward Lazear and Sherwin Rosen [1981] and Rosen [1986], is based on the idea that the employer puts his employees in competition by promising them prizes specified in advance and, by indicating to them that the attribution of these prizes will not depend on the absolute value of an employee's production but on the position that this production occupies in comparison to that of the other employees. In situations of imperfect control of individual work in complex organisations, pay-for-performance can reduce a dual problem of moral hazard and adverse selection: the uncertainty of the environment and the privacy of some information about workers' actions and performance.

In sport, there are many examples of working relationships in which the actions of the athletes are not verifiable, but the results are. Tournament theory, a variant of game theory, is therefore a frequently used analytical framework for studying competitions in individual sports. It establishes a central relationship between the winners' payoffs and the effort they expend during the competition. Competition organisers use a financial incentive to perform to make their event the most interesting for the public and consequently the most economically profitable.

Tournament theory is based on the postulate that the athletes' results during competitions are a function of the gains they expect to make. The non-linear distribution of prizes will have a positive impact on the level of performance and the individual effort made by each competitor; this effort being an increasing function of the endowment gap. The structure of the endowments distorted towards the top of the Professional Golfers' Association (PGA) Tour is an example of this: the winner receives 18% of all prizes, second place 10.8%, third place 6.8% and last place 0.2%.

An optimal tournament contract should have a double effect: an increase in the participation of the best available talent and an improvement in the performance achieved by each of them. The principle of a sports tournament includes explicit and verifiable clauses: the remuneration at each level of competition, the overall prize money for the competition, the number of competitors and the elimination process. The remuneration for each level of qualification is completely disconnected from labour productivity. In other words, receiving twice the amount of prize money as your final opponent when winning a tennis tournament does not imply that the winner is twice as productive, but is merely intended to induce the two contenders to work hard to win [Lazear and Rosen, 1981].

Sporting performance and financial incentives

The existence of such a correlation has often been tested in sport: athletics, boxing, running, cycling, golf, motorcycling, figure skating, skiing, motorsports, and tennis. If the tournament model is correct, the increase in prize money should be accompanied by an improvement in performance. The opposite assumption is that players always play to their full potential and their performance is not conditioned by financial considerations.

The relevance of the first hypothesis as chosen by golf tournament organisers seems to be validated. Players become more accurate when the following two variables evolve: the progression of prize levels and the concentration of prize differentials offered for first place. To identify the incentive effect of individual performance, Ronald Ehrenberg and Michael Bognanno [1990] analysed all 40 of the 1984 PGA Tour tournaments. They showed that an increase in prize money of $100,000 resulted in an average of 1.1 fewer strokes per round. They also found that the greater the fluctuation in marginal revenue that would result from one place change in the rankings the smaller the score differences between players and the better the performance of the competitors.

When Tiger Woods won the 1999 US PGA, he received $630,000, while the runner-up, Sergio Garcia, received $378,000. However, their productivity is similar: the average score over the four courses of 67.75 strokes for Woods and 69.50 strokes for Garcia (2.5% difference), yet there is an inequality of earnings between them of 252,000 dollars (40% difference). Rafael Nadal defeated Roger Federer in the 2008 edition of Wimbledon with a very close score: 6-4, 6-4, 6-7 (5/7), 6-7 (8/10), 9-7. It took the two finalists 4 hours and 48 minutes and five sets that ended in the smallest difference (2 games), with the addition of two tiebreaks at the end of the third and fourth sets, which also ended in the smallest difference (2 points). Nadal earned 1.1 million euros (compared to 550,000 euros for Federer), 2,000 points in the ATP rankings (compared to 1,200 for Federer) and the number one world ranking at the expense of Federer. This hierarchical compensation model is designed to motivate both Woods and Nadal to put forth the maximum effort once they have decided to participate in these tournaments [Lazear & Rosen, 1981].

The results of the application of tournament theory to the thirty best tennis players in the world (2007 ATP ranking) do indeed support, in accordance with one of its predictions, the existence of an incentive effect associated with sports performance, namely that a highly unequal prize structure between the tournament rounds increases the probability of the 'best player victory'. But, the participatory effect is not confirmed, i.e., the overall monetary prize of the tournament does not significantly influence the performance level of the players [Barget, Llorca and Teste, 2011].

Heterogeneity of athletes and competition intensity: the *superstar* effect?

A growing body of literature examines the role that heterogeneity amongst participants in a sporting competition may have on individual effort, which is captured by the variation in performance [Babington, Goerg and Kitchens, 2020]. In the disciplines studied (men's and women's golf and skiing), the presence of a superstar does not discourage the participation of competitors. However, the superstar effect on the level of performance is complex to measure because its calculation is sensitive to the composition of the sample of athletes taken into account, as well as to the assumptions made.

One assumption is that increased rivalry motivates athletes to perform at their best. This seems to be the case for athletes below the superstar's level who, in his presence, improve their results. But too great a difference in talent can reduce the efforts of opponents. If the chances of victory seem very low, the fear of injury or the desire to move on to other tournaments may explain the lack of involvement of other players.

In professional golf tournaments from 1999 to 2006, the participation of the world number one was associated with a lower performance by his opponents, with a negative Woods effect of 0.8 strokes on average per tournament when compared to his non-participation. However, golfers far below Woods in the standings seemed to be much less affected by his presence than the top players, as the stakes are different for these two categories of players. This drop in performance does not appear to be related to risk-taking by outsiders resulting in lost strokes, or to a loss of motivation by other golfers due to the media's disinterest in them, which focused on Woods' performance. Conversely, when Woods' dominance came to an end in 2003-2004, good players improved their performances with and against him [Brown, 2011].

Another study examined whether there is a "Usain Bolt effect" comparable to the "Tiger Woods effect" [Hill, 2014]. Are the competition and the spectacle better if the level of the competitors is relatively homogeneous? Results from the main 100m sprint events organised between 2007 and 2012 indicate a positive effect of the presence of the world's best sprinter on the times achieved by his rivals.

This apparent contradiction between the "Woods effect", which negatively affects performance, and the "Bolt effect", which positively affects performance, could be explained by the simultaneity of the sprinters' efforts and their extreme briefness (under 10 seconds). In golf, however, players are not directly challenged and have time to modify their behaviour according to the intermediate results of the tournament, which is spread over several days.

Asymmetrical sports tournaments, that is to say, with a dominant competitor in the position of ex-ante favourite, frequently constitute a situation that results in a problem of imbalance in the competition that can alter the interest in the spectacle. The choice of an incentive mechanism is, therefore, a delicate one for the organiser to reconcile sometimes contradictory imperatives: attracting the best and maximising their effort to beat a record by employing a high financial reward, not demotivating weaker competitors by offering prizes that are too unevenly distributed, organising a competition of uncertain outcome with talents of similar abilities, and raising the average effort as much as possible to preserve the quality of the event.

Learnings

What types of athletes should be attracted (of comparable level or heterogeneous level)? What is the impact of the tournament format (number of participants, elimination phases, entry selection, and handicap to balance the competition)? What is the impact of the winner's prize on the incentive for effort? What is the impact of the prize differential?

The tournament model allows sporting organisers to avoid two errors: making a bad decision (choosing mediocre athletes) and not making a good decision (eliminating talented athletes). Tournament theory overcomes some of the shortcomings of the superstar theory and is a complementary approach. In individual sports such as golf and tennis, the tournament is used as a tool to filter out the best talent, promote performance, identify superstar contenders, maintain emulation and, maximise the organisers' revenue through the sporting spectacle.

The concentration of prize money and bonuses on the winners of individual competitions results in monetary earnings that are often higher than those of superstars in team sports. As a result, the superstars of individual sports are widely represented in the rankings of the world's highest-paid athletes. A look at Forbes magazine's annual ranking from 1990 to 2021 shows that golfers (Tiger Woods, Phil Mickelson), tennis players (Roger Federer, Rafael Nadal), Formula 1 drivers (Michael Schumacher) and boxers (Oscar de la Hoya, Evander Holyfield, Manny Pacquiao) dominate.

However, the share of superstars playing in individual sports has declined significantly and steadily over the decades: 60% on average during the 1990s for the Top 10, 50% during the 2000s and 40% during the 2010s. This trend is confirmed if the field of observation is extended to the Top 50. How can this trend be explained?

Is there a relative weakening of the value of monetary incentives in individual sports compared to the increasing revenues of football superstars? Is there a noticeable change in the economics of some team sports such as football (TV rights, sponsorship, salary overbidding, free movement) that significantly increases the income of these superstars? Is there a decline in the audience of some individual sports, such as Formula 1, tennis, boxing or golf, linked to a lack of charismatic superstars likely to generate phenomena of infatuation and self-reinforcement? Is the imbalance of the competition and the lack of uncertainty of the outcome caused by a lasting hegemony of the same champions at the root of this disinterest?

Extensions

Academic publications on tournament theory certainly provide some answers to the economic questions that any competition organiser asks in order to offer a quality spectacle [Szymanski, 2003]. However, theoretical research and empirical studies need to be further investigated as many questions remain and there is no universal answer to all the issues. For example, a frequent criticism of the payoff function is that it is a black box that does not fully explain how effort translates into chances of winning. There are uncertainties about how tournament theory can be applied. To be accurate and operational, answers to these questions must be based on a better link between assumptions and results. The significance of the parameters and the variables found must also be made explicit to increase the explanatory power of the model.

The measurement of performance in some sports is questionable. The number of strokes required to complete a round of golf or the time to run a certain distance in running objectifies performance. Conversely, winning in a head-to-head competition does not constitute an absolute indicator of individual performance [Barget, Llorca and Teste, 2011]. There is also an element of randomness that reduces the scope of the price/effort/performance relationship in certain disciplines where the ranking of the competition is the result of scores awarded by judges (gymnastics, figure skating, synchronised swimming, etc.).

Empirical studies focus on the monetary gains distributed by tournament organisers. However, these earnings account for only 30 to 40% of the superstars' income, depending on the discipline. The main sources of income are signing bonuses, advertising contracts and fees from exhibition matches. Financial guarantees to ensure the participation of the best talents have a positive impact on participation and a negative impact on the effort made. The effect of the endowment must therefore be put into perspective. Furthermore, superstars seem to be motivated as much or more by the possibility of gaining points in the world ranking to become number 1 than by receiving the financial reward.

Tournament models only shed light on part of the logic of superstars: signals on the quality of athletes, participatory and/or incentive effects. For example, when the average prize money doubles for long-distance races in athletics, the average time decreases. Did the amount of prize money distributed have an impact on the performance of the runners or the participation of the best specialists? As another illustration, it seems that the best performances at the top-funded golf tournaments are due to the fact that they attract the best players (selection bias), rather than the efforts made by the participants.

Moreover, the behaviour of sportsmen and women, and in particular of superstars, can be explained by objectives other than a desire to maximise their financial gains: the spirit of competition, the desire to excel, the cult of the self, the search for glory and the desire to become a legend - all of which are internal motivations within the sporting logic. Finally, several negative externalities alter, from a moral viewpoint, the principles of the tournament model. A distorted upward distribution of prizes, aiming to obtain a maximum effort from participants by overdosing the victory to the detriment of the rest of the cohort, is accompanied by a psychological pressure generating health problems (overtraining, overwork, injuries, doping) and ethical violations (cheating, corruption, violence).

Further information:

Michael Babington, Sebastian J. Goerg and Carl Kitchens, "Do Tournaments With Superstars Encourage or Discourage Competition?", *Journal of Sports Economics*, vol. 21 (1), 2020.

Eric Barget, Matthieu Llorca et Thierry Teste, « La théorie des tournois appliquée aux joueurs de tennis professionnels : peut-on parler d'incitations à la performance ? », *Revue d'Economie Politique*, vol.121, 2011.

Jennifer Brown, "Quitters never win: The (Adverse) incentive effects of competing with Superstars", *Journal of Political Economy*, vol.119, n°5, 2011.

Ryan Elmore and Andrew Urbaczewski, "Loss Aversion in Professional Golf", *Journal of Sports Economics*, vol.22 (2), 2021.

Ronald G EHRENBERG and Michael L BOGNANNO, "Do Tournaments have incentive effects?" *Journal of Political Economy*, vol.98, n°6, 1990.

Oliver ENGIST, Erik MERKUS and Felix SCHAFMEISTER, "The Effect of Seeding on Tournament Outcomes: Evidence From Regression-Discontinuity Design", *Journal of Sports Economics*, vol.22 (1), 2020.

Brian C. HILL, "The Superstar Effect in 100-Meter Tournaments", *International Journal of Sport Finance*, vol.9, n°2, 2014.

Edward P. LAZEAR and Sherwin ROSEN, "Rank-order tournaments as optimum labor contracts", *Journal of Political Economy*, vol.89, 1981

Sherwin ROSEN, "Prizes and incentives in elimination tournaments ", *American Economic Review*, vol.76, n°4, 1986.

Stefan SZYMANSKI, "The Economic Design of Sporting Contests", *Journal of Economic Literature*, 41 (4), 2003.

Related articles: competitive balance, segmentation, *superstars*.

Third-party ownership: a controversial instrument?

Definition and characteristics

Third-party ownership (TPO) refers to the acquisition of economic rights to sportsmen and women by a third party from outside sport, who seeks to increase the value of the professional involved. The 'property' of these athletes is divided into shares and sold like any other commodity. This practice has developed strongly since the 2000s in certain team sports, particularly football.

However, given the speculative nature of the transfer market, this 'third-party ownership' has existed for a long time, in various forms and names: during the 1960s in Italy and Spain, the 1970s in South America (particularly in Brazil, where it constitutes the main form of football investment) and in Portugal and England in the 2000s [Brocard, Rossi and Semens, 2019]. The indebtedness of the clubs in these leagues has prompted them to find alternative financing solutions to strengthen and maintain their position within the elite. The exponential increase in transfer indemnities in the post-Bosman era of 1995 has favoured TPO: €403 million for the global transfer market in 1994-1995, €2.1 billion in 2008-2009 and rising to €5 billion in 2017-2018 (data from the 55 national leagues under UEFA's jurisdiction).

In practical terms, a club that does not have the funds to recruit a player can call on one or more investment funds to co-finance the transfer. In this case, the player who is 'owned' by more than one owner is no longer just an employee under contract with his club. At the end of the contractual financing period, the club must repay the investment fund(s) plus interest. In reality, the club intends to sell the player before this deadline in the hope of making a capital gain.

As an example, in 2012 FC Porto sold a third of the economic rights of French defender Eliaquim Mangala for €2.6 million out of a total value of €7.8 million, to the Doyen Sports Investments Limited fund, which is part of the Doyen group whose main activity is gold, uranium and coal mining. The Portuguese club also sold 10% of the player's rights to the company Robi Plus. The 2014 transfer of Mangala from FC Porto to Manchester City for €54 million was split as follows: €30.6 million for the selling club (56.67% of the player's 'ownership' rights), €18 million for the Doyen Sports fund (33.33% of those rights), €5.4 million for Robi Plus (10%) [Bastien, 2017]. Such a return on investment for the player's co-owners is unheard of in the business world!

TPO can provide clubs with a competitive advantage and create value, thereby contributing to their financial viability. As such, TPO has become a real source of financing for football clubs. Alternatively, a downturn in transactions would put these clubs in difficulty and they would be in a state of over-indebtedness. Several

Spanish and Portuguese clubs risked this in the 2010s (between 5 and 15% of their players are under TPO) and have achieved financial and sporting success in their domestic league and the Europa League. In many Central and Eastern European countries, the percentage of players owned by third-party companies varies between 40 and 50%: Slovenia, Montenegro, Croatia, Albania, Macedonia, Serbia, Bulgaria, Romania, Hungary and Bosnia.

Abuse of the system

TPO tends to accelerate the mobility of athletes and increase the price of transfers as third-party companies repeatedly seek the highest and fastest earnings possible. In reality, clubs sell players under TPO, not according to their sporting interests, but according to the interest of the third party. Another consequence is that players are not free to manage their careers as they might wish and are dependent on the will of non-sporting entities.

Furthermore, the profits generated by TPO are not necessarily reinvested into football. The practice of TPO accounted for 9.5% of the turnover of international and domestic football transfers, at 544 million euros (CDES and CIES estimate for 2013). The speculative concerns about the purchase and sale of athletes by the various stakeholders (agents, holding companies, investment funds, etc.) favour the search for short-term profits, independently of the sporting objectives of the clubs, which could lose control of their transfer policy and sporting strategy.

Another disadvantage of this multi-ownership of players is the conflict of interest that can undermine the integrity and fairness of competitions. Indeed, when third parties hold economic rights to players playing in teams competing at a national and international level, there is a risk of manipulation of results according to the expected profits of player trading. Moreover, it appears that several of the most important sports agents are also shareholders in investment funds specialising in TPO, with the objective being to organise non-transparent tax evasion circuits (see the journalistic investigation by the European Investigative Collaborations consortium via 'Football Leaks' published in 2016, on illegal practices in the sport).

Finally, the traders commissioned by these investment funds, which are frequently domiciled in tax havens, constitute a portfolio of young talent that can best be sold when they are 23 or 24 years old. One of the perverse effects of the TPO is the overbidding to acquire these players, often aged 15 or 16, who become the property of these funds even before they have signed their first professional contract.

What regulation?

The destabilising effect of TPO on the functioning of competitions has justified the reprobation of the European Union and the football governing bodies. FIFA has banned this practice, which has been criminalised since 2015 [Brocard, Manfredi, Mondou and Van Seggelen, 2016]. The effectiveness of this internal rule in the world of football is compromised by legal recourse initiated by some investment funds. Indeed, an absolute ban on TPO could be incompatible with European law, and its fundamental freedoms of establishment, provision of services, free movement of workers and capital. FIFA's decision could be seen as an abuse of its dominant position restricting the economic freedoms of clubs, players and third parties [Marmayou, 2016].

Without waiting for the legal debate to be settled, investors have come up with a new technique called third-party investment (TPI). The aim is to circumvent the regulatory constraints on TPO. This financial arrangement consists of a club taking on debt from an investment fund to acquire players. The funds no longer own the players directly, but hold claims on the clubs' assets and earn interest at high rates.

Of course, clubs no longer need to sell these players to pay off their debts. However, if the debt burden is too great, they may be forced to do so. When a player is sold under TPI, the selling club repays the funds from the transfer fees received. The transaction is not considered illegal as the fund holds an asset claim and not an asset. However, some of the disadvantages of the TPO are also present in the TPI: the influence of external investors on the clubs' sporting policy, the dependence of the clubs on these specialised companies, and the conflict of interest for investors involved with several clubs in the same competitions including the risk of manipulation of results.

Since the mid-2010s, another innovation has been developed to finance player transfers. This is the securitisation of debts, which consists of grouping together the debts of the clubs and cutting them up for resale in the form of bonds called ‘football or soccer bonds'. Investors know the annual interest rate, but do not necessarily know the content of these debts, the number of bonds sold nor the nature of the guarantees undertaken by the clubs to obtain loans from investment funds [Arrondel and Duhautois, 2018]. This system is inspired by the "sub-prime" at the heart of the 2008 financial crisis with toxic debts composed of bonds inflated with real estate debts of American households that would turn out to be insolvent.

With the TPOs signed before 2015 still in force and the multiplying TPIs and football bonds, international football is constantly finding additional financial means, but by submitting itself more and more to a short-term speculative logic that is external to it. In doing so, and to counteract regulation, the financial products offered to clubs are forced to become more sophisticated and, consequently, more opaque [Bringand, 2019].

Further information:

Luc ARRONDEL et Richard DUHAUTOIS, *L'argent du football*, Cepremap, Paris, 2018.

Jérémie BASTIEN, *Le football professionnel européen dans un système capitaliste financiarisé en crise. Une approche régulationniste des facteurs de changement institutionnel,* Thèse en science économique, Université de Reims Champagne Ardennes, 5 décembre 2017.

Charles BRINGAND, « TPO, coup de sifflet final ? », *Jurisport*, Dalloz, n°196, avril 2019.

Jean-François BROCARD, Giambattista ROSSI et Anna SEMENS, *Agents sportifs et marchés du travail. Analyses issues du football mondial*, Juriséditions, Dalloz, Paris, 2019.

Jean-François BROCARD, Luis MANFREDI, Julien MONDOU et Theo Van SEGGELEN, « Third Party Ownership : une interdiction controversée », *Jurisport*, Dalloz, n° 160, janvier 2016.

Jean-Michel MARMAYOU, « Lex sportiva et investissements, interdiction du *Third party ownership* », dans Franck Latty, Jean-Michel Marmayou et Jean-Baptiste Racine (dir), *Sport et droit international (Aspects choisis)*, Presses universitaires d'Aix Marseille, 2016.

Related articles: sports agents, Bosman ruling, club deficit, competitive balance, sporting exception, financial fair play, transfers.

Transfers: should the system be reformed?

Definition – Stakes

'Player transfers' can have several meanings depending on the disciplinary approach adopted. From a sporting perspective, transfer refers to the movement of a player from one club to another. In contrast to the movement of personnel in the normal business world, the movement of players in professional sport is not free. Several conditions must be met in the sporting sector to ensure that competitive balance is not impaired. From a legal point of view, 'transfer' refers to the renegotiation of an employment contract and the signing of a transfer agreement. The legal security of the contract is at the heart of the negotiation. From an economic point of view, the transfer can be analysed as the determination of the monetary amount necessary for the selling club to release a given player. What is important here is the economic basis for such an amount.

The economic analysis of player transfers cannot, therefore, be carried out independently of the sporting logic and its specificities (competitive balance, sporting calendar, particular regulations), nor of the legal logic and its constraints (competition law, contract law, etc.). It is by taking into account these three dimensions (economic, legal, sporting) that the transfer system must be analysed to understand how it works, its limits and ultimately to propose improvements.

Whichever definition is chosen, a transfer is defined as the authorisation to change clubs issued by the competent sporting authorities. It must be ensured that the system of inter-club mobility thus conceived respects both the interests of the players and those of the clubs and that it does not distort sporting competition. It is in the interest of the players that they should not be regarded as mere commodities or financial assets subject to the laws of market supply and demand. Legal advice is useful in defining and enforcing the employment contract, but also in regulating the investment of a third party in the economic rights of a professional player, or TPO (third-party ownership) because, in return for its investment, this third party can receive its share of the value of the player's possible future transfer. The club's interest must also be preserved insofar as it has taken risks in investing in a player's talent and is entitled to claim its fair return on investment before authorising the transfer. Finally, the fairness of the competition must not be distorted, since the uncertainty of the result is the very basis of the value of the sporting spectacle. It is therefore important to avoid too great a concentration of sporting talent in the richest clubs.

The central question that arises is how effective such a transfer system is and whether it could be dispensed with. It must be accepted that in most economic sectors, such a transfer system does not exist when an employee changes employer. So how can we analyse transfer payments in the professional football sector? A history of the transfer system helps to understand its origins and its development over time.

History

The history of transfers cannot be separated from the history of professionalism. If we take the example of football in France at the end of the 19th century, two phenomena developed: sham amateurism also known as ‘shamateurism’ and player poaching. In the first case, amateur players began to threaten clubs that they would no longer play if they did not receive monetary compensation for their travel expenses, medical expenses or loss of earnings compared to their official employment. The players blackmailed the clubs by monetising their talent, and gradually the negotiation process became focused on the issue of transfers at the end of the season. The players then had total freedom to transfer to another club, which led to bargaining and player poaching by the clubs, that practically carried out ‘secret operations’ to buy players. The turning point came in 1925 when the transfer of a player was made subject to the formal agreement of the leaving club. This rule, which was intended to stop player poaching, had perverse effects, particularly through the existence of underground financial transactions to obtain the agreement of the departing club. The transfer system was born. However, after 1945 and until the 1970s, transfers virtually disappeared due to the introduction of lifetime employment. It was not until the 1980s that they were revived and expanded then exploded, in particular, after the Bosman ruling of 1995.

Value

How can we determine the amount of a player's transfer based on his value? It should be remembered that economic theory has always encountered difficulties in establishing the value of a painter or a painting. The same difficulties are encountered when calculating the value of a football player. Several types of approaches have been developed based on determining the cost of production, the cost of training or the talent of the player. This always comes down to knowing, for the purchaser, whether or not the price paid for the transfer is justified by its use value, i.e., by what it can bring in. It is also at this level that there may be a discrepancy between the price and the value of the transfer insofar as the transfer market is far from perfect with numerous externalities (information asymmetry, power, etc.). The transfer market is thus characterised by speculative bubbles that endanger both the competitive balance of the leagues and their financial stability. This is why the transfer market must be regulated. Given all the externalities and various abuses that characterise it, allowing it to operate freely leads to a sub-optimal balance.

Regulation

The first major reform of the transfer system took place in 2001, following a long and difficult dialogue between the football authorities (FIFA, UEFA, professional leagues), the European Commission and players' representatives (FIFPro). The principles of this agreement, which have been incorporated into FIFA regulations, mainly concern the protection of minors, remuneration for training, the stability of contracts, solidarity between professional and amateur clubs and dispute management. This reform aimed to guarantee the free movement of players within acceptable limits, the stability of teams and the competitive balance of leagues. Such a difficult compromise explains the ongoing negotiations between the various parties involved (clubs, unions, leagues, players, agents) to try to change the transfer system. The question that remains is: is such a system efficient?

Economic analyses show that the transfer system is imperfect. It permits the logic of competitive imbalance to continue: the richest clubs buy more sporting talent, have better sporting results and therefore more income, which in turn allows them to buy more sporting talent. We are thus heading towards a quasi-closed league (de facto) of the richest clubs at the European level. The sale of players would also be at the origin of a speculative financial bubble that threatens all the leagues, and even if progress has been made, the regulation of the transfer market is not yet sufficiently effective. This is why the professional players' union (FIFPro) advocates freedom of movement for players and the payment of salaries owed to the selling club by the buying club. It also recommends that the status of players' agents is reviewed and that their remuneration be paid by the players rather than by the clubs.

It is therefore clear that behind the reform of the transfer system, the entire economic model of professional football deserves to be reviewed. Profound reforms are certainly to be envisaged: regulation of the labour market through finance (financial fair play, club licence, salary cap, etc.); improvement of the quality of information (transparency, status of players' agents); regulation of the allocation of sporting talent (protection of development clubs, quota of home-grown players) and the improvement of solidarity between professional and amateur sport. The reform of the transfer system is inseparable from the global reform of the sporting spectacle sector and from the reform of the economic system as a whole.

Further information:

Bastien DRUT, *Economie du football professionnel*, Repères, La Découverte, Paris, 2011.

Jean-Jacques GOUGUET (Dir.), *Le sport professionnel après l'Arrêt Bosman. Une analyse économique internationale,* Pulim, Limoges, 2005.

KEA – CDES, *The Economic and Legal Aspects of Transfers of Players*, Etude pour la Commission Européenne, January 2013, non publiée.

Related articles: sports agents, economics of crime, competitive balance, externalities, regulation, segmentation, value.

CHAPTER V – INTERNATIONALISATION OF SPORT

Strategies for the internationalisation of sport were put in place at the end of the 19th century. This phenomenon is linked to the diffusion of all English sport following the second industrial revolution in Great Britain, then is amplified with the revival of the Olympic Games of the modern era in 1896. However, it was not until the 1980s that the internationalisation of sport became true globalisation of both competitions and sporting practices. Such globalisation, beyond its economic dimension, also constitutes a major stake from an ideological, political, social, cultural and ethical point of view, which we will analyse.

Global public good: a choice between two models for a new global sports governance?

Definition

- ***Generalities***

The notion of Global Public Goods (GPGs) appeared in international negotiations at the end of the 1990s, essentially around the issues of sustainable development as defined by Agenda 21 following the 1992 Rio World Conference. Given the extent of global imbalances such as global warming and the collapse of biodiversity, there is a growing call for worldwide governance of these common goods: air, water, climate, energy, health, education, financial stability, knowledge, information, culture and peace.

The conceptual origin of GPGs can be found in economic theory with the traditional distinction between private and public goods. It should be remembered that private goods are defined by the two principles of rivalry and exclusion, whereas in contrast, public goods are defined in relation to the two principles of non-rivalry and non-exclusion. Non-rivalry means that the consumption of a good by one individual does not prohibit its use by another individual; non-exclusion means that it is not possible to prevent an individual from enjoying goods.

The definition of these public goods is tantamount to recognising market failures that imply the need for state intervention to provide goods that the market is unable to produce, such as major infrastructure or national security, thus justifying the establishment of public services.

The new feature of the 1990s is that we are no longer in the context of nation states and Keynesian policies but in the context of globalisation and liberal policies. This implies that market failures no longer concern the domestic market but the global market, and that there is a lack of global institutions to address such failures.

- ***Sport as a GPG?***

The question of whether sport could fit into the GPG category raises two questions:

- If a GPG is a commodity that the market cannot produce, then does the sporting spectacle escape this category? Should we consider that there is a sporting exception?
- If we adopt a completely non-market definition of sport, could we then consider that it can be included in the category of GPGs alongside culture, education and health?

This means that we would have to return to the fundamental question of the definition of sport, which the community of sports economists has always refused to do. Indeed, it would be necessary to review such a definition of the word sport, which encompasses radically different realities that have nothing to do with each other. On one side, there is sport as a spectacle, as a market, as a business dominated by the quest for profit maximisation. On the flip side, there is a disinterested, authentic sport, which can effectively be placed alongside culture or education. We must therefore denounce the common attitude of 'dressing up' the business of sport with the values of authentic sport just to hide its abuses.

The misunderstandings surrounding the definition of sport stem from the difficulty of articulating two opposing systems of representations and values. For some, sport is an exaltation of nature, balance, health, respect for others and fair play. But for others, it is about competition, about surpassing oneself, which leads to the cult of performance by any means, with no regard for ethics or health. Is it possible to reconcile these two radically opposed views?

The sporting spectacle is above all a commercial product in a global market dominated by large groups and powerful international sports organisations. In no way can the sporting spectacle be equated with a GPG. What would remain is an authentic grassroots sport, which corresponds to the spirit of GPGs, such as culture, education or health. Of course, it would be possible to admit that the sporting spectacle contributes to the development of authentic sport by giving grassroots participants the means to achieve their personal goals. However, this presupposes that professional sport is free of all excesses and can therefore serve as a model. Sadly, this is not the case. In this context, two models are being discussed for a new global governance of sport.

New global governance of sport

- ***A top-down model.***

The question is which global body should be set up to manage GPGs from on high and impose its laws on the State? Which institution will be able to implement such governance? The sports world is already characterised by the existence of an institutional pyramid going from the local to the global level. Nevertheless, there are many shortcomings in such governance. The IOC is an interesting example of the contradictions between sporting and commercial objectives that considerably weaken the effectiveness of its governance. In general, we can speak of a relative submission of sports institutions to the market and its commercial and financial logic with all the harmful consequences that this implies. Conversely, good governance can be defined as the ability to control deviant behaviour (doping, corruption, cheating, etc.), which is increasingly difficult on a transnational scale. Which is why new institutions are needed.

One proposal is to make humanity a subject of law and thus create a new category, the common goods of humanity and based on the same model as that of the world heritage of humanity. Genuine sport could be part of such a category of new human rights. Apart from the technical difficulties, it is to be feared that the ruling elite who are part of the neo-liberal ideology are opposed to such a view of the world. They prefer competition and the struggle of all against all to cooperation and social justice. This is why global solutions from above remain very hypothetical and raise the question of whether a solution from below is conceivable with the constitution of a counterweight at the level of civil society.

- ***A bottom-up model***

The current period is characterised by the interweaving of three crises: an economic and financial crisis, an ecological crisis and a social crisis. As a result, there is a risk of the collapse of the thermo-industrial civilisation that will eventually allow us to rebuild our societies on a sustainable basis. It is becoming more and more vital to recognise that infinite growth in a finite world is not possible and that it would be better to try to set up a society of chosen and not subdued degrowth. The recomposition of our societies could be carried out from the determination of new operating logics: the priority is social and consists in ensuring well-being for all, which implies drastically reducing the inequalities which today reach an intolerable level; the constraint is ecological because we cannot indefinitely continue to destroy the living organism which conditions the human habitability of the planet; the economic aspect must come last when considering the best means to achieve the social objectives under ecological constraint. This is therefore a reversed logic compared to the current situation in which the primary objective is economic (performance, competitiveness, profitability, etc.), with ecological and social aspects relegated to the rank of secondary objectives or even completely ignored. Such a change of the paradigm would of course have major consequences on the sporting spectacle and the practice of sport.

Given the need to drastically reduce our ecological footprint, it is not impossible to think about the disappearance of mega-sporting events as we know them today. The carbon footprint of these events depends largely on international transport. In general, the society of widespread mobility of people and goods may no longer be sustainable or profitable, and we could see a relocation of the world economy.

In this perspective, we are back to the bottom-up development characteristic of the 1970s before the neo-liberal revolution of the 1980s made this model seem archaic. It is a question of determining the right territorial scale to best face the contemporary crisis and it is recognised that the small community can be effective in solving economic, social and environmental problems. The practice of sport would find its place in such a model contributing to a good quality of community life.

In the end, there could be a growing disconnection between sport as a spectacle, with all its excesses, and the disinterested practice of sport for pleasure and health, without any competitive spirit. There are no winners or losers but just the simple joy of being together in a playful exchange.

Further information:

Jean-François Bourg et Jean-Jacques Gouguet, *Economie politique du sport professionnel. L'éthique à l'épreuve du marché*, Vuibert, Paris, 2007.

Pierre Dardot et Christian Laval, *Commun. Essai sur la révolution du XXIe siècle,* La Découverte, Paris, 2014.

Inge Kaul, Isabelle Grunberg et Marc Stern, *Les biens publics mondiaux. La coopération internationale au XXI e siècle,* Economica, Paris, 2003.

Serge Latouche, *Petit traité de décroissance sereine*, Mille et Une Nuits, Paris, 2007.

François Lille et François-Xavier Verschave, *On peut changer le monde. A la recherche des biens publics mondiaux,* La Découverte, Paris, 2002.

Robert Redeker, *L'emprise sportive,* François Bourin, Paris, 2012.

Pablo Servigne et Gauthier Chapelle, *L'entr'aide, l'autre loi de la jungle,* Les Liens qui Libèrent, 2017.

Related articles: economics of crime, sporting exception, the future of sport, regulation.

Macroeconomics of international sporting success: how to win medals?

The literature on the determinants of sports performance is antiquated (from the 1950s) and multidisciplinary. Historians, geographers, physicians, sociologists, demographers, lawyers and economists have mobilised their tools and concepts: the length of time the practices have been in use and their social and spatial diffusion, the climate, the diet and the physical characteristics of the athlete, race, religion, the population, the political system and the per capita income.

Since the 1970s, econometric analysis has made it possible to improve our knowledge of the explanatory variables of Olympic medal wins according to the nations involved. It should be remembered that, although the IOC considers the Olympic Games to be a competition between athletes, the media's ranking of countries according to the number of medals won is a major geopolitical issue.

In addition to the three variables traditionally taken into account in modelling Olympic success - Gross Domestic Product (GDP) per capita, number of inhabitants and political regime - new variables were tested: the advantage of the organising country, the regional-cultural dimension and public spending on sport. However, other unobserved variables should be included to refine the analysis (notably doping).

The great imbalance in global sporting performance

A primary observation of the unequal access to sports performances can be made with a complete assessment of the distribution of medals according to the countries participating in the Olympic Games, a quadrennial multidisciplinary event and central indicator of sporting success [Bourg and Gouguet, 2007]. A historical and geographical reading of the results over the period from 1896 to 2018, i.e., 51 editions of summer and winter Olympic Games, reveals a very large imbalance in the Olympic podium achievements.

Developing countries have an average medal-winning 'productivity' more than five times lower than developed countries: 56 medals per country compared to 309. The values of this medal concentration ratio for low-income countries (10 medals on average per country, 1% of all medals), lower-middle-income countries (32 medals, 4% of all medals) and upper-middle-income countries (105 medals, 24% of all medals) reflect the magnitude of the disparities within developing countries (grouping of countries by level of development selected by the World Bank in 2019).

Success in sport is therefore largely reserved for high-income countries: 45 countries in this group won 71% of the Olympic medals (out of a total of 18,882 gold, silver and bronze medals), while 98 developing countries won only 29% and, 78 countries - almost all of them developing - did not win any medals. Only a few high-income countries participating in the Olympic Games did not win a single medal, demography being a major handicap for them: Brunei, Monaco, Oman in particular. These data show a close relationship between economic development and sporting performance.

The economic and demographic variables

The pioneering work of Donald Ball [1972] and Ned Levine [1974] studied the role of population and GDP per capita. GDP is an aggregate whose level is correlated with the wealth and quality of facilities, the country's ability to prepare competitive athletes for the Olympic Games with high-performance equipment, highly qualified technical staff, a medical system at the cutting edge of innovation and massive public and private funding of elite sport.

However, throughout the history of the Olympic Games a very high GDP alone has not guaranteed a large medal haul. Singapore (83rd in the world ranking of countries according to the number of Olympic podiums), Luxembourg (89th), Hong Kong (99th) and Kuwait (103rd) are marginal in terms of Olympic success, but are at the top of the list in terms of wealth on the planet, in the absence of political and budgetary choices in favour of top-level sport.

Population size is a limiting factor for small nations and nothing more than a resource for others to exploit. To develop a sporting elite, a country must have at least one million inhabitants. However, more than a quarter of the nations entered in the Olympic Games have a demographic size below this threshold. A calculation of the elasticity of the number of medals in relation to the population has shown that all things being equal, a country with average characteristics could win 16 more medals in one edition of the Summer Olympics if its number of inhabitants doubled [Blais-Morisset, Boucher and Fortin, 2017].

A large population is a necessary, but not sufficient, condition for winning titles. India, Pakistan, Bangladesh and Vietnam together account for 24% of the world's population and only 0.2% of the medals. Of course, a country with a large population will have a large pool of potential talent and will be able to allocate its fixed costs more profitably: from the 2000 Summer Olympics to the 2016 Summer Olympics, China has always been in the top three in the medal standings by nation, along with the United States, and Russia or Great Britain.

The political variables

The political regime helps to explain the distribution of tasks between nations. For this purpose, it is necessary to specify whether the country is democratic, liberal, communist, a market economy, one-party, a planned economy, or a post-communist country in transition to a more democratic and market-oriented system. Communist or formerly communist countries generally win more, or much more, than their national wealth or population size would predict.

The former USSR was, and Russia is, despite an average GDP per capita, a leading sports power (2nd in the world medal rankings). In the context of the Cold War during the years 1970 to 1990, the communist countries had a clear advantage over the capitalist countries. Indeed, these countries were able to mobilise resources centrally and concentrate them on a priority objective: the financing of Olympic disciplines and the production of medals. From 1976 to 2004, between 22.6% and 35.8% of developed countries with a liberal democracy won at least one medal. This percentage is between 90% and 100% for communist countries and between 33% and 100% for ex-communist countries in transition since 1992 [Andreff, Andreff and Poupaux, 2008].

The impact of the amount of public spending on medal wins has been the subject of an econometric study that confirms the importance of state action [Blais-Morisset, Boucher and Fortin, 2017]. Public funding reflects a country's desire to showcase itself during the Olympic Games for the dual purpose of geopolitical prestige and national cohesion. In such a way, the UK invested 340 million pounds to prepare for the 2012 Olympics, which was four times more than the amount spent on physical education in schools. The results were convincing as the British finished third in the world after the United States and China with 65 medals. Australia, for its part, spent 240 million euros on its Olympic elite, even though it has three times fewer inhabitants than Great Britain. The Australians ranked 10th in the world with 35 medals, ranking higher than in terms of demography (55th) or GDP (20th).

According to the specifications of the model used by Blais-Morisset, Boucher and Fortin [2017], and all things being equal, a country with average characteristics would have to invest between 56 and 74 million euros (holding constant the investment of competing nations) to gain an additional medal four years later. In other words, if France wants to reach the announced goal of 80 medals at the 2024 Paris Olympics [Andreff, Scelles, Bonnal, Andreff and Favard, 2019], it would have to increase the public budget dedicated to the preparation of its Olympic elite by about 1.6 billion euros over four years in order to win 25 more medals than in 2016 (42), this figure takes into account the benefit of being the organising country (+30% on average of podiums, i.e. 13 medals).

The sporting and societal variables

The 'host country effect' lies in the impact of the mobilisation of the nation hosting the event: increased funding for the preparation of its athletes, constant support from supporters and the national media, motivation increased tenfold by the patriotic enthusiasm, knowledge of the competition venues, familiarity with the climate, less stress due to transport and acclimatisation, and the absence of geographical, time and cultural differences. Stephen Clarke [2000] has determined that, on average, for the twenty-four editions of the Summer Olympics from 1896 to 1996, the organising countries increased their number of medals by almost 30%. For the next five editions of the Olympics, from 2000 to 2016, the expectation of further gains was 29%.

This 'home advantage' variable, therefore, has a significant influence on the overall performance of the host country, although there are considerable differences between countries: +53% for China in 2008 (Beijing) compared to 2004, +33% for Great Britain in 2012 (London) compared to 2008, +29% for Australia in 2000 (Sydney) compared to 1996, +21% for Greece in 2004 (Athens) compared to 2000, +8% for Brazil in 2016 (Rio) compared to 2012. The consequences of the increase in the number of medals awarded over the years have been neutralised to allow comparisons over time: from 921 medals in 2000 to 974 medals in 2016.

Some research with econometric models for individual winter sports has shown that the home advantage of athletes at the Olympics or World Championships results in an average 51% improvement in performance: 11 percentage points from public support and 40 points from their knowledge of the facility [Chun and Soo Park, 2021].

The regional-cultural dimension was introduced by Madeleine Andreff, Wladimir Andreff and Sandrine Poupaux [2008] to capture the effect of sporting culture by grouping countries with similar sporting specialities into nine major regions of the world. At the 1976 Olympic Games, the medals were distributed as follows: 53.6% for Eastern Europe, 19.9% for North America, 18% for Western Europe, 5.9% for Asia, i.e. 97.4% of the total for these four regions; the Middle and Near East, South America and Oceania shared the rest (North Africa and Sub-Saharan Africa did not obtain any medals). For the 2004 Olympic Games, the distribution was as follows: 26.3% for Eastern Europe, 26% for Western Europe, 16.6% for Asia, 16.4% for North America, i.e., a total of 87.3%; the other regions of the world took advantage of the decline of the former communist countries after the collapse of the Soviet bloc and its satellite countries to increase their shares (5.8% for Oceania, 3.1% for Sub-Saharan Africa and 2.7% for South America.

Learnings

As soon as a country has a certain level of wealth, demographic resources and political will, sporting success can be achieved. The United States is the most successful nation with 2,827 Olympic medals from 1896 to 2018, far ahead of the former USSR and Russia with 1,885 medals and Germany with 1,235 medals. These variables are good indicators of sporting success. For example, population and GDP per capita together explain 40% of medal wins [Levine, 1974]. But population alone cannot account for the distribution of podiums by nation.

A model of the distribution of medals at the 2008 Beijing Olympics, built with about thirty economic, social and political variables, was tested on the Olympics from 1976 to 2004 to determine the importance of each variable. Ex-post, this medal econometrics correctly predicted the results of 70% of the countries analysed at the 2008 Olympics, i.e., the number of medals obtained was 95% within the confidence interval (medals predicted minus medals won). The amount and forms of public support seem to guarantee sustainable medal gains that are much higher than those expected from an estimate based solely on economic and demographic indicators [Andreff, Andreff and Poupaux, 2008].

The amount of government spending on elite sports appears to be a better indicator of Olympic performance than GDP per capita, which remains statistically significant. Therefore, the national sports budget variable represents a relevant public policy instrument to achieve more ambitious podium targets. Indeed, the elasticity of the number of medals obtained by a country at the Summer Olympics relative to the public investments it has made varies between 0.23 and 0.38 depending on the specifications used [Blais-Morisset, Boucher and Fortin, 2017].

Predictive models are better at explaining the hierarchy of performance between nations in multi-disciplinary events such as the Olympics, than in the World Cup or the Euros, for example. At the summer Olympics, a thousand medals are at stake. In football, there is only one competition and only one winner. The number and repetition of competitions (38) allow a balance to be struck at the Olympics, with possibilities to redress failure in certain sports. Furthermore, the role of the State does not seem to be a significant variable in football, given the poor results recorded by China despite massive investment in the sport.

Further thoughts

Certain research has shown that the variables used are insufficient and can be combined in complex ways. Therefore, the approach to the macroeconomics of Olympic medals could be enriched by seeking to identify the explanatory power of two new variables. The first of these is doping, a variable that is a very important priority, but not observed [Andreff, Andreff and Poupaux, 2008]. Medical assistance for sports performance is a structural fact of contemporary competitive sport. If doping - legal or not, detectable or not, known or not - is consubstantial with high-level sport, the question of its unequal impact on performance arises. The effectiveness of the substances and methods used, masking products or innovations in the pharmacopoeia to circumvent the anti-doping rules does not have the same impact depending on the athletes, the countries, and the financial, scientific or legal resources mobilised.

The past (in a cold war context) or present (in a soft power logic) organisation of real state doping, differentiates the capacities to obtain medals in favour of the athletes 'benefiting' from such a 'preparation' (see the examples of the former USSR, the former GDR and Russia). The influence of this undetermined variable, due to the lack of a database, must be evaluated. Doping can create a decisive advantage in that the final difference recorded at the end of the competition is infinitesimal (less than 1%), even though the use of doping devices can improve results by 3 to 10% depending on the discipline.

The ranking of countries according to the number of medals obtained at the Sochi Winter Olympics (2014) partially illustrates the impact of a massive public-doping policy. Thus, a predictive model of podium wins based on socio-economic variables (without taking doping into account) attributed 24 medals and 4th place in the world rankings to Russia [Andreff, 2013]. Ex-post, the country hosting the Olympic Games won 33 medals (38% more than forecast) and ranked 1st in the world. After the detection and punishment of doping athletes (disqualification), Russia retained 22 medals and was demoted to 5th place in the world rankings.

A second variable is worth looking at, that of the results of the Olympic Games edition that immediately follows the one organised by the host country. For the Summer Olympics from 2000 to 2016, there was a significant increase in the number of medals compared to the edition that preceded the hosting of the Olympics, i.e., eight years earlier:+35% for Great Britain(2016/2004),+34% for China (2012/2004), +10% for Australia(2004/1996). Greece is the only exception with a 79% drop(2008/2000), which can be explained by the consequences of the investment cost for the 2004 Games, which was uncontrolled and beyond the country's budgetary capacity, as well as by the consequences of the serious economic crisis that affected Greece afterwards. This ‘post-Olympic Games’ effect can be explained by the fact that the athletes taking part in this post host country Olympic Games are largely the same as those who benefited from exceptional public and private support four years earlier.

Further information:

Wladimir ANDREFF, Nicolas SCELLES, Liliane BONNAL, Madeleine ANDREFF et Pascal FAVARD, *Actualisation du modèle de prévision économique de la répartition des médailles olympiques : Tokyo 2020*, rapport remis à l'Observatoire de l'économie du sport, 1er mars 2019.

Wladimir ANDREFF, “Economic Development as major determinant of Olympic medal wins: predicting performances of Russian and Chinese teams at Sotchi Games”, *International Journal of Economic Policy in Emerging Economics*, 6(4), 2013.

Madeleine ANDREFF, Wladimir ANDREFF et Sandrine POUPAUX, « Les déterminants économiques de la performance olympique : prévision des médailles qui seront gagnées aux Jeux de Pékin », *Revue d'Economie Politique*, 118 (2), mars-avril 2008.

Donald W BALL, “Olympic Games Competition: Structural Correlates of National Success”, *International Journal of Comparative Sociology*, 3 (3-4), 1972.

Paul BLAIS-MORISSET, Vincent BOUCHER et Bernard FORTIN, « L'impact des dépenses publiques consacrées au sport sur les médailles olympiques », *Revue Economique*, vol.68 (4), 2017.

Jean-François BOURG et Jean-Jacques GOUGUET, « Développement économique et performance sportive à l'échelle mondiale », dans *Economie politique du sport professionnel*, Vuibert, Paris, 2007.

Seungwhan CHUN and Sang SOO PARK, “Home Advantage in Skeleton: Familiarity versus Crowd Support”, *Journal of Sports Economics*, vol.22 (1), 2021.

Stephen R. CLARKE, “Home advantage in the Olympic Games”, in Cohen Graeme. et Langtry Tim., eds, *Proceedings of the Fifth Australian Conference on Mathematics and Computers in Sport*, University of Technology, Sydney, 14-16 June 2000.

David FORREST, Ian G. MCHALE, Ismael SANZ and J.D TENA, “An Analysis of Country Medals Shares in Individual Sports at the Olympics”, *European Sport Management Quarterly*, vol.17, 2017.

Eva Marikova LEEDS, “Olympics Performance”, in Paul Downward, Bend Frick, Brad R. Humphreys, Tim Pawlowski, Jane E. Ruseski and Brian P. Soebbing (eds), *The SAGE Handbook of Sports Economics*, Sage, London, 2019.

Ned LEVINE, “Why Do Countries Win Olympic Medals ? Some Structural Correlates of Olympic Games Success: 1972”, *Sociology and Social Research*, 58, 1974.

Related articles: doping, globalisation of sport, economic weight of sport, soft power.

The globalisation of sport: the domination of an economic logic?

Characteristics and origins

The phenomenon of globalisation translates the idea of the total integration of the sporting economy into a vast market that has become a place of mobility for spectacles, athletes, capital, images, sports articles and consumption models, etc. Sporting activity has long had an international dimension, at least since the first modern Olympic Games (1896), the result of a historical and natural creation at the end of the 19th century. The ultimate goal of the sports movement has always been universality. The IOC has 206 member countries and FIFA is made up of 211 affiliated national associations, which is more than the UN, to which 193 states belong. The globalisation of sport has evidently encountered the least obstacles.

The internationalisation of sport can be defined as the preliminary stage of globalisation, with the opening up to the outside world of sports practices and predominantly national events, but with a limited extension to certain regions of the world and certain disciplines (1890-1950). Globalisation characterised the worldwide development of sport during the period from 1950 to 1990. From the 1990s onwards, the conjunction and intensity of two dynamics set in motion the globalisation of the issues at stake. The new information and communication technologies (television, satellite, digital) erased distances and borders in space, time, language and ideology. The market has imposed itself on sport as a reference point and common measurement scale [Bourg and Gouguet, 2012].

The creation of an increasingly integrated system of mass production/consumption of sports events has amplified globalisation. This system includes a virtually unified competition area, sports bodies and companies that manage their activities on a planetary basis with globalising mechanisms based on the market economy and a liberal logic: the conquest of new markets, international search for value creation, access to financial markets, circulation of production factors.

For almost a century, this commercialisation could not emerge because of the domination of a conception of 'Coubertinian' sport based on amateurism and voluntary work. Two decisions deserve to be acknowledged to understand the integration of sport within the market economy. First, the deregulation of the Olympic order, with the removal of two major institutional obstacles (the possibility to pay all athletes from 1981 and to commercially exploit the Olympic symbols from 1986) and the decompartmentalisation of the economic life of sport with the creation of global marketing programmes (from local sales to global sponsorship and broadcasting agreements).

These two decisions have increased the value of the sporting spectacle, increased competition between private operators for rights and aligned the strategies of the sporting movement and companies with a global logic.

However, the globalisation of sport must be put into perspective. This process is indeed asymmetric. The study of the spatial distribution of participants, performances and events reveals an international diffusion both limited and unequal, to the zones whose economic development level allows the construction of venues and the supervision of participation, the extension of leisure time and the disposal of purchasing power allowing a new model of consumption. The North America-European Union-Asia triangle is a major concentration of competition venues, medal winners and financial flows [Bourg and Gouguet, 2007].

The effects of globalisation

Increasingly, what is at stake is the appropriation of the financial resources generated by competitive sport. The monopoly held by sporting institutions (IOC, international federations, professional leagues, clubs) for the exploitation of the sporting spectacle has created a scarcity that has allowed them to boost their turnover and extract increasing profits from these events. In response to the rising number of property rights (radio and TV broadcasting rights, internet, marketing, by-products, naming of events and venues, etc.) there is an increase in the number of economic players and professions in the sports industry, in the broadest sense of the term: marketing, communication, financial investments, career management, sports medicine and sports betting.

The IOC and the international federations are non-governmental, non-profit organisations, with few legal means of constraints on sports organisations and athletes around the world. Moreover, their governance is opaque and not very efficient because of an inversion of goals: commercial objectives take precedence over sporting objectives. If for decades the sporting movement has defended the heritage of the Olympic 'values' defined by Pierre de Coubertin, this official discourse is no longer convincing in the face of chronic profiteering and recurrent scandals.

It appears that the sporting movement must often try to interpret the new rationality driven from the outside by thirty or so firms that are omnipresent in the sports markets (sponsors, broadcasters, sporting goods manufacturers, communication agencies). Thus, sporting institutions are placed under the control of private companies that are only accountable to their shareholders. These same institutions indeed retain the power to symbolically legitimise the achievements of athletes and to officially validate the results of competitions. But the globalised market now overwhelms sports regulation, which facilitates the multiplication of abuses: illegal betting, corruption, money laundering, and doping [Andreff, 2019].

The bases of new governance must be defined. The international sporting bodies are numerous, not active enough and often contested in their role and objectives. It is, therefore, necessary to review both the bodies and the fields of governance in order to clarify their functions, legitimise their mandates and strengthen their powers. It is not only a question of compensating for the failures of the market and making it efficient but also of protecting the world's public domain in sport and finding an alternative model by changing the paradigm.

Two different, non-antagonistic paths can be explored to contribute to the establishment of true global governance: the creation of a specific supranational organisation (the United Nations Sports Programme, UNSP); the multiplication of independent and specialised regulatory agencies producing standards and incentives on a global scale (ethics, doping, finance, corruption, etc.).

Professional sport is threatened more than ever by a total subordination to a globalised financial logic. All ethical violations result in a distortion of the sporting spirit. To stop such abuses, a new global sporting regulation will have to be set up. The interest is in knowing if this institutional reform will be able to promote sport as a World Public Good, i.e., as an element of the common heritage of humanity!

Further information:

Wladimir ANDREFF, *An Economic Roadmap to the Dark Side of the Sport*. vol I*: Sport Manipulations*; vol II*: Corruption in Sport;* vol III*: Economic Crime in Sport*, Palgrave. Mac Milan, Cham, 2019.

Jean-François BOURG et Jean-Jacques GOUGUET, *Economie du sport*, Repères, 3ème édition, La Découverte, Paris, 2012.

Jean-François BOURG et Jean-Jacques GOUGUET, *Economie politique du spot. L'éthique à l'épreuve du marché,* Vuibert, Paris, 2007.

Related articles: Bosman ruling, global public good, macroeconomics of international sporting success, economics of crime, economic weight of sport, televised sport, taxes.

Soft power: political instrumentalisation of sport?

The concept of soft power is a matter of political science and international relations. However, the increasing use of sport by states for internal and external political reasons has important socio-economic consequences for professional sport, which fully justifies the inclusion of the issue in this book.

Definition and purpose

In a post-Cold War context (since the break-up of the Soviet bloc and the collapse of the communist regimes in 1989), the concept of power can be defined as the ability of a state to influence other states to behave in a way that conforms to its interests. To achieve this, countries can use three main methods: hard power, soft power and smart power. According to Joseph Nye, an American theorist of this new approach to power in international relations [1990], hard power refers to the ability to directly impose one's will on a third party through military, political or economic means.

Conversely, soft power is defined by the capacity of the State to indirectly orient international relations in its favour, with an action or a position in a given direction, by a range of means other than coercive (threat, use of force). The attractiveness of cinema, music, culture, language or sport is part of this diplomacy of influence. These powerful vectors of soft power are one of the many tools that allow the State to strengthen its legitimacy and expand its international audience. States that have the means to do so use both hard and soft power, the latter being more effective than the former, which is seen by public opinion as manipulation or violence. The effects of this subtle blend of soft and hard power is reflected in the notion of "smart power" [Nye, 2011].

Television turns every mega-sporting event into a 'global village' that brings together several hundred million highly receptive people. With its popularity and universality, sport bypasses borders and ideologies. Moreover, sport is one of the rare domains in geopolitics where power is not rejected, but most often admired [Boniface, 2021]. Also, sporting diplomacy has become a real tool in the foreign politics of numerous countries, allowing them to use persuasion or seduction in place of force.

Geopolitics through sport

Sport is a component and a marker of a state's power, of its ability to exist on the international scene. A state can thus obtain an aura that it could not normally have without recourse to certain forms of soft power: hosting sporting events, winning Olympic medals, taking control of professional foreign clubs, acquiring TV broadcasting rights and naturalising athletes, etc.

Some countries in the Persian Gulf, unable to compete for medals with the big Olympic nations, have specialised in events: The United Arab Emirates, in Dubai, with a Formula 1 Grand Prix, a European Tour golf tournament, a professional tennis tournament and a stage of the World Rugby 7s circuit; in Bahrain with a professional cycling team (Bahrain-McLaren) and a Formula 1 Grand Prix; in Saudi Arabia with the Dakar Rally from 2020 to 2024.

Then again, for other countries (United States, China, Russia, Germany, Great Britain, France, etc.), it is a question of asserting a global and total power by activating all the levers of sports geopolitics. Many states see the Olympic Games as a continuation of the Cold War by other means, with a cult of nationalism and propaganda for external use.

For countries with huge economic and demographic resources, as well as a long-standing sporting culture, the games are based on the position obtained in the Olympic medals world ranking. This is the case for the United States (2827 medals at the summer and winter Olympics, from 1896 to 2018), the USSR-Russia (1885 medals), Germany (1235 medals), Great Britain (883 medals), France (840 medals) or China (608 medals won, for the most part, in a recent period, as a consequence of internal ideological changes).

In addition to the Olympic podiums, these major sporting powers equally concentrate the organisation of the two principal mega-events: 2008 Summer and 2022 Winter Olympics for China, 2012 Summer Olympics for Great Britain, 2014 Winter Olympics for Russia, 2024 Summer Olympics for France, 2028 Summer Olympics for the United States; 1998 Football World Cup for France, 2006 for Germany, 2018 for Russia and 2026 for the United States (with Canada and Mexico).

Soft power, nation branding and sporting power: Qatar as the example

An atypical multinational state strategy in the field of sporting policy is developed by a few oil countries with abundant capital. Amongst these states, it is Qatar which - lacking the tools and means of hard power - is leading and assuming a strategy of influence through sport that no other country had engaged in before [Guégan, 2017]. Qatar's instrumentalisation of sport is a method of accumulating rapid international visibility [Boniface, 2021]. Indeed, Qatari policy puts soft power and sports power at the service of nation branding, i.e., the promotion of the State's brand image by building and enhancing national identity, tangible and communicable, as transnational firms do, to gain profits and rewards. Qatar is omnipresent through various investments in the sports economy, media overexposure and a desire to create a 'brand Qatar' as a land of excellence in high-level sport.

It is true that this Middle Eastern micro-state is rich in the short and medium-term, but weakened by the duration of its gas and oil resources, which will not last 50 years. Moreover, this emirate suffers from a strong economic vulnerability (too little diversification outside of hydrocarbons), demographic (2 million inhabitants), territorial (1,400 square kilometres, less than Corsica), military (lowest share of GDP devoted to military spending in the region) and geopolitical (complicated relations with Saudi Arabia and Iran). The more Qatar is talked about, the less likely it is to be annexed or endangered by its powerful neighbours. All in all, it is not certain that the implementation of this non-coercive power of influence through sport is more costly for Qatar than buying weapons [Boniface, 2021].

For all these reasons, Qatar is investing massively abroad within the framework of the 'Qatar National Vision 2030' plan, drawn up in 2008, whose objective is to have half of its income dependent on activities other than gas and oil (as opposed to 20% at present). To this end, the Qatari monarchy is taking stakes in the sports sector via the country's main sovereign wealth fund, the Qatari Investment Authority. Qatar thus intends to become a world sports capital to promote its fame and reputation, stimulate its tourist economy and build an alternative economy for the post-energy rent era based on leisure and entertainment, amongst other things.

To do this, Qatar is taking increasing shares of the global sports spectacle market in order to increase its diplomatic influence, the only means it has to ensure the security and integrity of its territory, protect its sovereignty, its population and its interests in a tense and unstable geographical area. Classically, but increasingly effectively, Qatar attracts many major events to shape its image as a modern, globally recognised power: World small pool swimming championships and men's squash championships (2014), men's world handball championships (2015), World road cycling championships (2016), World athletics championships (2019), Football World Cup (2022 with a record budget of 74 billion euros, the cumulative equivalent of the previous five editions), World swimming championships (2023). The ultimate goal of this strategy of taking over the sports field by the Qatari authorities is Doha's bid to host the Summer Olympics in 2032!

The objective of the Qatari state's acquisitions of football clubs is to gain in symbolism [Franck, 2010] with the purchase of Paris Saint Germain in 2011, via Qatar Sports Authority, as well as the Miami football club (Major League Soccer) in 2016. It should be noted that the United Arab Emirates was a pioneer in this field with the takeover of Manchester City by a sovereign fund in 2008.

Qatar also buys TV broadcasting rights in France (football, rugby, tennis, basketball, etc.) through the beIN Media Group and controls sports broadcasting in the Arab world with Al Jazeera. The method of strengthening its national teams through the almost instantaneous naturalisation of top foreign athletes is singular. For example, 23 of the 28 players who wore Qatari shirts at the 2015 World Handball Championship were not from the emirate and represented seven nations.

The ambivalent effects of sport's *soft power*

It is true that these investments in the global sporting economy contribute to the strong growth of the professional sports turnover and allow the international sporting movement to reap substantial revenues and increasing profits. However, this influx of money is causing inflation of salaries and transfers, as well as an extension of the value chain of the sporting activity (multiplication of sports agents, marketing consultancy companies, financial investments), which is at the origin of progressive outsourcing of important financial flows. In addition, this capital threatens the competitive balance of championships. For example, between 2013 and 2021, thanks to the injection of more than 2 billion euros into PSG's budget by Qatar, the Parisian club has outrageously dominated the league with seven of the nine titles awarded.

It is also questionable, in terms of cost-benefit analysis and the well-being of the populations concerned, whether it is appropriate for states like China and Russia to spend whatever it costs to increase their influence abroad and perpetuate their power at home. The rate of cost overruns for the Olympic Games and the level of expenditure incurred by these two host countries are proof of this, with unprecedented records: 1130% for the 2008 Summer Olympics in Beijing (32 billion euros instead of 2.6 billion) and 495% for the 2014 Winter Olympics in Sochi (50 billion dollars instead of 8.4 billion).

Finally, this generous providential windfall does not encourage the international sporting movement to question the authoritarian nature of certain political regimes with which it has developed, since the beginning of this century, a close partnership for the organisation of major sporting mega-events. These 'democraships' totally instrumentalise sport, with soft power or nation branding objectives to hide the flagrant human rights violations. The moral, ethical and educational credo that is supposed to have inspired the foundation of contemporary sport has difficulty remaining credible.

Further information:

Pascal BONIFACE, *Géopolitique du sport*, Dunod, Paris, 2021.

Egon FRANCK, "Private Firm, Public Corporation or Member's Association, Governance Structures in European Football", *International Journal of Sports Finance*, vol.5, 2010.

Jean-Baptiste GUÉGAN, *Géopolitique du sport, une autre explication du monde*, Bréal, Paris, 2017.

Joseph S. NYE Jr, *The Future of Power*, Public Affairs, New York.2011.

Joseph S. NYE Jr, "Soft Power", *Foreign Policy,* n°80, Slate Group, LLC, 1990.

Related articles: macroeconomics of international sporting success, globalisation of sport, club owners

Chapter VI – The economic impact of sport

Sport can be a lever for territorial development thanks to the hosting of sporting events or sporting participants, thus provoking a shock of internal demand. The extent of such an economic impact depends largely on the characteristics of the host territory and its measurement can be conceived in the short or long term (in this case we speak of a legacy). Sport can therefore be a very profitable investment in terms of job creation and added value for the host territories. Nevertheless, one must remain very vigilant as to the reliability of the methodologies used to measure such an impact.

Opportunity cost: what policies should be implemented around mega-sporting projects?

Definition

In economic analysis, opportunity cost refers to the study of the rational behaviour of an agent in a situation of scarcity of available resources. It should be remembered that economic rationality can be defined as the art of allocating scarce resources subject to alternative uses (Lionel Robbins). In a situation of resource scarcity, every actor is condemned to make choices. This choice of an option means the abandonment of another alternative option. The opportunity cost is the value of the option abandoned. For example, a child consumer with a limited budget (10 euros) will have to choose between buying sweets (at 1 euro each) or chocolates (at 2 euros). He can buy 3 chocolates and 4 sweets. If he wants a bar of extra chocolate, he will have to give up 2 sweets. The opportunity cost of the chocolate is two sweets, i.e., the cost of giving up sweets to have extra chocolate. The same reasoning can be applied to the production side. Given the resources available, producing an extra unit of goods means giving up producing a given quantity of other goods. For example, a farmer who has a given area of land will have to give up producing x tons of corn to produce y additional tons of wheat. This is his opportunity cost.

This analysis in terms of opportunity cost can thus be applied to the determination of the rationality of choices. For example, an agent's choice of a given project will be deemed rational if its net benefit is positive but greater than the net benefit of all the alternative projects that the agent has had to forego. It is this latter conception of opportunity cost that we will examine in the case of a certain number of sports projects that are the subject of debate as to their economic legitimacy. This raises the whole question of social choices, which often involve very difficult trade-offs.

Mega-sporting projects: what is the cost opportunity?

It is interesting to recall a few emblematic examples of controversies that have arisen around major sports projects, always with the same question in mind: would the resources have been more beneficial to society if they had been invested in sectors other than sports?

- ***Football World Cup 2010 in South Africa***

The academic literature on the economic impact and legacy of the 2010 World Cup is very heterogeneous. First of all, one has to put aside the ex-ante studies commissioned by the government, which all promised considerable economic benefits for the country. On the other hand, the ex-post academic literature is much more critical of the real impact of this event, which was a failure for South Africa's economic development. If the World Cup brought in a profit for FIFA estimated at between 2 and 3 billion dollars, it represented a huge financial loss for South Africa estimated at more than one billion dollars. This is a classic case of privatising profits and socialising costs. These two opposing views of the economic impact of the Cup raise the question of whether it was appropriate to hold the event in South Africa. Reasoning in terms of opportunity cost helps to clarify the debate.

As soon as the World Cup was awarded to South Africa, the Minister of Housing recognised that programmes to build hundreds of thousands of low-cost social housing units could be jeopardised to provide funding for the 2010 World Cup. For example, it was agreed that there would be a shift in the focus of the Johannesburg integrated five-year plan. The priorities originally announced were: housing, health, education, local development, security, and various services including water, housing and electricity. After the World Cup was awarded, the priorities of the five-year plan were changed. To finance the construction of the large stadium in Johannesburg, the initial cost of which had been underestimated, it was decided to reduce allocations for public services. The cost of the Soccer City stadium is equivalent to the cost of housing over 200,000 people under the reconstruction and development programme. This is the opportunity cost of building this large stadium.

- ***Generalisation***

First of all, the same type of opportunity cost calculation can be mentioned in the case of the construction of large stadiums for the 2014 football World Cup in Brazil. For example, the stadium in Manaus cost 260 million dollars for a capacity of 46,000 seats, while the average number of spectators during the championship is around 500. On the other hand, 20% of the homes in Manaus have no running water or toilets with connection to a sewage system, with all the sanitary consequences that this implies. The number of homes connected that have been foregone represents the opportunity cost of the construction of a large, oversized stadium that is doomed to become a white elephant. In general, the large street demonstrations at the time of the World Cup reflected the resentment of Brazilians who demanded investment in public services: housing, education, transport, health and security instead of stadia.

In short, the opportunity cost of organising major sporting events in the countries of the South raises the fundamental question: should they be organised? With the benefit of hindsight, many economists would say no, given the opportunity cost. It would therefore be important to better evaluate the opportunity cost of hosting major sports events or building major sports facilities in developing countries. Africa is a good field of experimentation at a time when sports projects are multiplying on this continent. For example, what is the opportunity cost of building and then maintaining large stadiums?

- Is it better to invest in a few large stadiums to host major sporting events?
- Is it better to invest in multiple basic facilities to develop the practice of sport in the community and to allow the population to benefit from the multiple positive externalities linked to sport (education, health, social ties)

To make a decision, it is necessary to put instruments in place, which improve decision-making.

Decision-making

The preceding examples of contested projects belong to what some schools of thought call imposed major unnecessary projects. This makes it possible to understand that the hosting of mega-sports events could be compromised, even in industrialised countries, because of the increasingly heavy opportunity cost. This is the reason why several candidate cities for the Olympic Games (OG) withdrew their bids following a referendum amongst the population. Take the Winter Olympics for example.

The refusal to host the 2026 Winter Olympics in Calgary (Canada) relaunches the debate on the opportunity cost of such an event. It is a real disappointment for the International Olympic Committee (IOC), which is now in the same situation for the 2022 Games, and why many candidates withdrew from the race (including Oslo, Lviv, Krakow, and Stockholm). In the end, two cities remained in the competition and Beijing triumphed over Almaty (Kazakhstan). For the 2026 bid, three other cities withdrew in 2018, before Calgary: Sapporo (Japan), Sion (Switzerland), and Graz (Austria). There are only two cities left in the race with Stockholm and an Italian duo (Milan and Cortina d'Ampezzo).

In a sluggish economy, it was recognised that renovating the former Olympic venues in Calgary means less investment in schools, roads and other public infrastructure, which is an opportunity cost considered too great by the public.

It will therefore be urgent to return to reliable modalities for the evaluation of the costs and benefits of the Games, but also to other modalities in the hosting decision-making process. A referendum does not seem to be an appropriate instrument. A citizens' conference could be a better solution to meet the democratic requirement, as citizens are increasingly reluctant to have choices imposed on them by politicians or experts.

Further information:

Eddie Cottle, *South Africa's world cup: a legacy for whom?*, Durban, University of Kwa-Zulu-Natal Press, 2011.

Julie Duchâtel *: La coupe est pleine. Les désastres économiques et sociaux des grands événements sportifs,* Genève, CETIM, 2013.

Ingrid Nappi-Choulet et Emmanuel de la Masselière (Dir.) : *L'héritage urbain et immobilier des mega-événements,* Les Cahiers de la Chaire Immobilier et développement durable, n°6. ESSEC Businesse School, 2018.

Paul Samuelson et William Nordhaus*, Economie*, Seizième edition, Economica. Paris, 2000.

Joseph Stiglitz, Carl Walsh et Jean Dominique Lafay, *Principes d'économie moderne,* De Boeck, Bruxelles, 2007.

Related articles: cost-benefit, evaluation, externalities, legacy, economic impact, social utility, value.

Sport employment: what is the evaluation of the job creation potential of sport?

Field definition

Sport has become a major phenomenon in modern societies. Despite this importance, there is still a lack of information needed for an in-depth analysis of the role of sport in the economy. Economists face great difficulties in measuring the economic weight, the economic impact of sport, its social usefulness, and also its job creation potential. Indeed, the traditional frameworks of national accounting as they were developed in the post-war period are not adapted to the economic apprehension of sport. Today, the project of elaborating a harmonised European sports satellite account promoted by the European Commission is progressing at a slow pace due to the multiple methodological obstacles encountered.

In terms of sports employment, the first difficulty in designing an observatory concerns the definition of sport itself. Indeed, depending on the definition adopted, the field covered will be more or less broad and the collection of information more or less difficult. Beyond a narrow definition of sport, there is a real risk of social dilution of this phenomenon, which further complicates the task of compiling data. For some, sporting activity is limited to regulated competitions, for others, any physical activity can be included in the field of study. Depending on which definition is adopted, the concept of sports employment will be more or less broad.

Three analysis segments

Traditionally, economists distinguish three segments to characterise the diversity of sporting practice: professional sport, amateur sport and leisure sport. The volume and nature of employment in the three cases will be very different.

- ***Professional sport***

Professional sport, or the sporting spectacle, is fully within the commercial sphere and can be considered in part as an economic activity like any other. It is the specific characteristics of the organisation of sporting competitions that have made it possible to recognise a specificity that allows it to escape the full application of competition law in Europe (or of anti-trust laws in the United States). In addition, professional sport is characterised by a great deal of heterogeneity. There are strong disparities between disciplines at three levels of analysis: from an economic point of view, football largely dominates the professional sports sector; from a cultural point of view, individual sports are clearly distinguished from team sports; from a territorial point of view, there are sport specificities according to the location of clubs (rural, urban, host regions). The evaluation of sport employment must take this diversity into account, which is not easy as information is not always available. This means that it is often necessary to complement a quantitative approach with a qualitative approach within sports organisations to improve our knowledge of employment.

- ***Amateur sport***

Amateur sport is organised around a multitude of sports clubs that either employ salaried staff to a greater or lesser extent or which continue to operate voluntarily. The discriminating factor is the size of these clubs, which allows them either to hire or not hire permanent staff. It is only the largest clubs that are able to create new jobs or maintain subsidised jobs.

- ***Leisure sport***

Leisure sport is no longer based solely on competition and the social demand is more about health, social ties and discovering nature. Faced with this evolution, sports clubs have had to change their offer and they must now face the competition of commercial structures that have developed in the field of tourism, private coaching, health and fitness. There is considerable potential for the creation of sports jobs to win over new audiences (disabled, sick, young people in difficulty, women, families, etc.) who have limited access to sports.

Information sources

The economic studies carried out give an extremely heterogeneous panorama of sport employment according to the scope of the field retained. In particular, this concerns all jobs closely or remotely linked to sporting activities: should they be counted as 'sport jobs' or not? As a general rule, economists consider three categories of employment:

- The direct jobs that belong to the main activity of the actors in the sports sector. They can be occupied by employees or remunerated persons and they constitute the core of the activity (players, trainers, medical staff, administrative staff).
- Indirect jobs are found in all activities linked to the sporting activity itself: service providers, communication, marketing, etc. These jobs are more difficult to define than the previous ones since they are based on the qualification of an interdependence link with the core activities. The question then arises as to how far back in the chain of interdependence one can go to decide that a job linked to the core activity is an indirect sports job.
- Induced jobs are similar to the economic impact of sport on a given territory. These jobs are the most difficult to evaluate

and in particular pose the problem of determining a multiplier.

The sum of these three types of jobs gives, in theory, a complete picture of the job creation potential of sport. In practice, it is not always possible to mobilise the necessary information, which results in more or less ambiguous attempts to evaluate sports employment:

- At one extreme, the entire sporting sector is taken into account, which, beyond its central core, includes upstream activities (sports infrastructures, sports equipment, etc.) and downstream activities (media, health professionals, etc.). There is a strong risk here of overestimating real sports jobs insofar as it is very difficult, in the upstream part of the sector, as in its downstream part, to isolate the percentage of the activity concerned that is determined by sport (this is particularly true of sports merchandise). The same methodological difficulties are encountered here as in the calculation of the economic impact of sport.
- It is possible to remain with the definition of the sports sector as conceived by the scope of the national collective agreement on sport. It is limited to companies whose main activity is in one of the following areas: organisation, management and supervision of sports activities; management of sports facilities and sporting equipment; teaching, training in sports activities and vocational training in sports professions; promotion and organisation of sports events. Companies belonging to other collective agreements are not included in this field of the sports sector, despite their close links with sporting activities: the golf and horse-riding sector; the sociocultural entertainment sector; the leisure and amusement park sector; the social and family entertainment branch. In the end, the sporting sector corresponds to a relatively narrow definition of this activity, which leads to an underestimation of what qualifies as sports employment, but has the merit of remaining at the core of sport, which does not suffer from ambiguity.

In the end, it is hoped that economic studies in the field of sports employment will be harmonised. Indeed, it appears that the job creation potential of sport is still poorly known. There is a need for better information and a more precise definition of the field to be covered to improve decision making in this area. A significant example is the decision to reduce subsidised jobs in associations without really calculating the opportunity cost of such a decision.

Further information:

CDES, *Etude sur l'avenir des emplois aidés dans le sport*, Etude pour le conseil social pour le mouvement sportif (COSMOS), 2019.

CDES, *Le modèle économique des clubs sportifs fédérés. Analyse et pistes de développement*, Etude pour le CNOSF, 2020.

CDES, *Contrat d'étude prospective de la branche professionnelle du sport (CEP Sport),* Rapport final de mission, 2008.

Related articles: volunteering, amateur sports clubs, sporting exception, economic impact, economic weight of sport, social utility.

Legacy: what is the long-term impact of mega-sporting events?

Definition

- ***A multi-dimensional concept***

The definition of the legacy of a major sporting event consists in answering the question: what long-term footprint will this event leave on the host territory? There is no simple answer to this question as many dimensions of society are involved: economic impact through the investments made in sports and non-sports infrastructures; social impact with, in particular, the improvement of conviviality, health, education, citizenship; political impact with soft power strategies for better positioning of the host country on the international scene; cultural impact due to the sporting values that can positively influence the behaviour of the actors; sporting impact with the improvement of accessibility to sport for all the public; environmental impact with the internalisation of the external effects linked to the hosting of the event. It will therefore not be easy to evaluate the legacy of an event in all these dimensions, especially as a certain number of them belong to the category of externalities. This is why economists propose to analyse two categories: the tangible and intangible legacies of major sporting events.

- ***Tangible legacy***

This term essentially refers to the long-term economic impact of all the investments made to host the event and which may have resulted in positive or negative effects on the population.

- In the case of the Olympic Games, the main positive effects concern sports infrastructures (stadiums, *arenas*, swimming pools, Olympic village, etc.); transport infrastructures (motorways, metros, trains, airports, etc.); urban renewal operations (rehabilitation of depressed areas, new districts). All these operations improve the efficiency and attractiveness of the host territory by fundamentally transforming its economic base. Barcelona, with the 1992 Games, is a good example of a stalled city that, thanks to the Games, was able to achieve international metropolitan status in record time.
- The main negative effects concern first and foremost the issue of white elephants, i.e., oversized sports facilities that are subsequently no longer of any use because of the lack of a resident club, sufficient spectator demand or funding for maintenance costs. This is the case for four stadiums from the 2014 football World Cup in Brazil (Manaus, Brasilia, Cuiaba, Natal) and most of the sports facilities of the 2016 Olympic

Games in Rio de Janeiro. Then there is the whole issue of social segregation and gentrification in the vicinity of Olympic facilities due to land speculation. The resident and underprivileged social classes cannot afford the increases in rents or the sale prices of apartments and have to leave. Finally, there is the issue of forced population displacement, with the destruction of entire neighbourhoods to build Olympic infrastructures and the questionable conditions for the rehousing of the population.

- ***Intangible legacy***

It concerns the evolution of the brand image of the host country, which can evolve positively or negatively in the eyes of international public opinion, depending on the success or failure of the event. Indeed, major sporting events are increasingly criticised for their social or environmental aspects, which can damage the reputation of the host country: Qatar with the 2022 football world cup at a time of global warming; Russia and the Sochi Winter Olympics, which resulted in massive destruction of natural resources and Saudi Arabia with the hosting of the Dakar Rally at a time of energy transition. This soft power strategy is increasingly being criticised and international sporting organisations would do well to ask themselves whether we are not reaching a threshold of social acceptability of sports events accused of wasting resources. This also applies to public opinion within each host country, which also denounces the waste of scarce resources when the basic needs of the population are not being met (education, housing, health, transport, etc.).

In light of these findings, the question arises as to what the net legacy of such events is: do the positive effects outweigh the negative aspects? Would it not have been more appropriate to invest in other sectors of activity? How do we decide?

Key Learnings

- ***The need for a global impact assessment***

The impact studies of the programme plans initiated by the European Commission (Directorate-General for Employment and Social Affairs) can be taken as a model. (Directive of June 2001). Such a procedure could be applied to the hosting of a major sporting event, on the understanding that for the environmental impact studies the same methodological problems are encountered. Complex relationships between different types of impact inevitably arise; feedback, synergies, amplification, irreversibility and latency. Territorial forecasting exercises would be necessary, for example, with the construction of scenarios. It is well known that the organisers of major sporting events have taken too many long-term decisions too lightly.

This is the case, for example, for the major sports infrastructures that have become white elephants.

- ***The need for an opportunity cost calculation***

Social utility is at the heart of public decision-making. It should be possible to determine the social utility for a city or a country hosting a major sporting event, but also the social utility of the projects that have to be abandoned. This raises the problem of calculating the opportunity cost of such events: would the investments made here not have been more profitable for society if they had been destined for other sectors such as education, health or transport? It is not certain that the legacy of major sporting events will live up to expectations. There are winners and losers in the legacy, and it is always the poorer social classes that bear the brunt of the negative effects of major sporting events, while the wealthier classes benefit from their positive effects.

- ***The need for new participatory decision-making tools***

It is now recognised that the participatory instruments used in France to improve decision-making are not effective. This is the case for public inquiries or the mobilisation of the National Commission for Public Debate. These procedures have in no way prevented the acceptance of projects of doubtful social utility. In the field of sport, the referendum on the opportunity to host the Olympic Games was also used, but it does not seem to be an appropriate response. This is why new participatory tools to help decision-making were established in the 1970s, including the citizens' conference, which seems to be very effective. According to all the evaluations carried out, these citizens' conferences are a real success in terms of the realism and impact of their recommendations. They represent a major contribution to decision-making and one wonders why they are ignored in the field of sport. One could imagine, for example, a citizens' conference on the opportunity to organise such mega-sporting events, notably the Olympic Games or the football World Cup, which are becoming increasingly polemic.

Further information:

Pierre Chaix (Dir.), *Les Jeux Olympiques de 1924 à 2024. Impacts, retombées et héritage,* L'Harmattan, Paris, 2017.

Center on Housing Rights and Evictions (COHRE), *Fair Play for Housing Rights. Mega Events, Olympic Games and Housing Rights*, www.cohre.org/mega-events.

Ingrid Nappi-Choulet et Emmanuel de la Masselière (Dir.), « L'héritage urbain et immobilier des méga-événements », *Les Cahiers de la Chaire Immobilier et développement durable,* n°6, ESSEC Business School, 2018.

Jean-Jacques Gouguet et Jean-François Brocard, « Grands événements sportifs : la nécessité d'une réévaluation », *Futuribles,* n°401, Juillet-Août 2014.

Related articles cost-benefit, opportunity cost, evaluation, externalities, economic impact, social utility, value.

Economic impact: developing a standard methodology?

Analytical foundations

The evaluation of the economic impact of mega-sporting events is always the subject of numerous disputes between experts, while it triggers passionate debates in public opinion on the legitimacy, or otherwise, of countries or cities hosting such events. In its simplest version, it is sufficient to assess the short-term economic impact. The study then excludes the measurement of social, environmental or long-term legacy impacts. Similarly, the impact assessment is only carried out at the national level, and no estimate is made for each host city, even when there are multi-site events such as the football World Cup. This simplest approach to the economic impact is a good opportunity to emphasise the development of a rigorous methodology and thus avoid the over-estimation that is too often seen in the work of many consultancy firms. It is indeed surprising to note the differences in evaluation between private firms and university laboratories, the former often proposing a considerable impact of major sports events; the latter being satisfied with much more modest results. Two points need to be discussed: the definition of economic impact and the choice of a theoretical model.

- ***Definition and impact***

The impact of a sporting event measures the net amount of what the event brought to the host territory compared to the hypothetical situation where the event would not have taken place. Such a counterfactual exercise is of course very perilous. How can we quantify what would have happened in the absence of the event? Hypotheses are necessary in order to establish one or more scenarios. These include the responsibility attributed to the sports event in the implementation of a certain number of actions (for example non-sporting infrastructures); the arrival of foreign tourists, which is not necessarily linked to the holding of the event. These two examples show that there is always a risk of overestimating the impact of a sporting event by attributing it economic contributions for which it is not responsible. The general principle is therefore to exclude from the calculation all investment or consumption expenditure that was already planned by the stakeholders, even in the absence of the sporting event. Moreover, this must be done transparently.

Furthermore, the impact must always be defined in terms of added value and not in terms of turnover. The aim is to measure the net increase in wealth in the region as a result of the event. Two examples are significant. First, there is the failure to take into account leakages outside the national circuit (imports, payments to service providers outside the reference territory, repatriation of profits or dividends by outside owners, etc.). The omission of such leaks is the cause of considerable overestimates of the real impact. This is a very common error in many studies. Then there is the failure to exclude expenditures that are not wholly or partly externally funded. Indeed, in the case of domestic funding, if this capital had not been invested in the sporting event, it would have been invested in other sectors of the economy anyway. It is therefore a simple redistribution of national euros that are not added to the economy. Counting them in the impact calculation is once again an overvaluation.

In short, many errors are commonly made as a result of an incorrect definition of the concept of economic impact. Whether it is in the assessment of the economic situation without the event or in the reasoning in terms of net income, these errors systematically lead to a considerable overvaluation of the actual impact of sports events.

- ***Choice of a theoretical model***

Three types of models are generally used to calculate the economic impact of mega-sporting events: the input/output model, the computable general equilibrium model and the Keynesian model. These three models belong to different paradigms and the choice of one of them is therefore not neutral. Beyond the doctrine inherent in each model, such a choice will also be guided by the availability of information.

The input/output model has been commonly used for many years in the English-speaking world and is now being used by many research firms in France to evaluate the secondary impact of mega-sporting events. However, this model has been the subject of much criticism in the academic world insofar as, by construction, it tends to considerably overestimate the economic impact of an external source of revenue in a given territory.

Computable general equilibrium models have often been accused of attaching more importance to theory than to data. They can be intellectually appealing in overcoming the shortcomings of input-output models. However, this poses a dilemma: should we use a model that is theoretically satisfactory but that requires information that is very difficult to obtain, which forces concessions with respect to the perfect model? Wouldn't it be better to settle for models that are less sophisticated but that allow for the use of quality information? It is the latter view that we have adopted. We prefer less theory but more quality information that will allow the emergence of reliable results.

We, therefore, advocate the open economy Keynesian model to calculate the impact of mega-events at the macroeconomic level and the Keynesian version of the economic base model to measure the impact at the sub-national level of the host territories. An external injection of income causes an increase in demand which leads to an increase in production and a distribution of income, again leading to an increase in demand. Leakages out of the circuit occur in the form of savings, taxes, imports and even crowding-out effects. These three stages of the calculation present specific difficulties in mobilising information, but the evaluation of the primary impact (net injection) is certainly the most important stage. Indeed, this primary impact measures the external shock to demand compared with the territory's economic situation without the event. It is at this stage of the calculation that the most accurate possible assessment must be made, as any error in the primary impact assessment is then amplified by the multiplier used to calculate the secondary impact (indirect and induced effects). The value of this multiplier must remain within the limits of the academic studies already conducted.

Main sources of impact overestimation

- ***Failure to take the substitution effect into account***

The substitution effect concerns consumption or investment expenditure linked to the event that does not bring additional value to the territory compared to the state of the economy in the absence of the sporting event. If the event had not taken place, the actors would have spent their income or invested in other sectors of activity. This is a simple substitution of expenditure and does not create additional wealth within the economy. Four types of expenditure are concerned and must be excluded from the calculation: those of actors belonging to the event's host region; those that benefit from internal funding within the region; those of occasional visitors who attend the event but whose trip was already scheduled for other reasons; those of visitors who have postponed their trip to take advantage of the event but who would have come anyway. In all these cases, there is a simple substitution of expenditure and not a net increase in wealth.

- ***Failure to take the crowding-out effect into account***

In terms of consumption, foreign visitors may have been dissuaded from coming to the host region, or local consumers may have been encouraged to leave the region because of the sporting event: fear of saturation, price increases or various nuisances. The question arises as to whether the expenditure of these deterred potential spectators is of the same nature and magnitude as that of actual spectators. The calculation of the crowding-out effect is not easy. It is possible to approach it with an evaluation method that consists of comparing the foreign tourist attendance of a hypothetical period without the event with the actual attendance.

- ***Multiplier***

The estimation of the multiplier is still the subject of controversy amongst academic experts. In order to retain a reliable value, it is possible to calculate a multiplier based on simulations of an exogenous spending shock using a macro-econometric model of the EMS-GAE type (Econometric Model for Simulation and General Analysis of the Economy). At a sub-national level, we use a multiplier that takes into account both the specifics of the spending agents and the specifics of the host territory. The important thing is not to propose multipliers that are too far from the ceiling value often accepted in the economic literature: of the order of 1.3 at a macroeconomic level; possibly a little higher at a given territorial scale depending on the degree of integration of the territory.

Key Learning

- ***For a standard method of impact calculation***

Such standardisation would have multiple advantages:

- This would avoid the circulation of studies with serious flaws in the impact calculation and subsequent damage to the image of the event. Too many gross errors have been made to date, which can lead to a rejection of this type of expertise by public opinion. Such rejection can harm the sporting movement and event organisers. For example, the referendums organised to test the social acceptability of the Olympic Games ended in rejection, as public opinion was no longer satisfied with fanciful figures.
- Such standardised studies could be compared. It is possible to compare results obtained with the same methodology. Sporting events could thus be ranked in relation to each other. This ranking can be useful for the public authorities to assess the profitability of their investment in a particular event.
- Finally, it would be possible to make valid comparisons of the results obtained by standardised studies before and after the event. This seems to us to be particularly desirable as a means to delegitimise complacent ex-ante studies that overestimate the real impact with unrealistic hypothetical calculations to avoid subsequent rejection by public opinion, who believe they are being deceived.

- ***For a relativisation of the results***

Calculations of the economic impact of major sporting events are highly prized by the public authorities and public opinion, which see them as a criterion of the social acceptability of these events. It is necessary to denounce the inadequacy of putting forward an absolute figure for the impact, which in itself does not make much sense. Saying that Euro 2016 had an impact of 1.2 billion euros on the French economy is more impressive than saying that this amount represents 0.05% of French GDP. This only confirms the academic results of other mega-sporting events: their impact is negligible on a macroeconomic scale. This even remains true for the Olympic Games.

We must also deplore the instrumentalisation of the ex-ante impact calculation to justify the hosting of the sporting event. At the very least, it is possible to calculate the return on investment of public funds invested in the event, but that is all. It should be remembered that it is not possible to justify the hosting of a sporting event by the extent of its economic impact. This requires another decision-making tool, the cost-benefit calculation, or even other negotiation tools. This means that beyond a single economic impact figure, there are more important elements to be considered, such as all the externalities linked to the event or its long-term legacy.

Further information:

Eric Barget et Jean-Jacques Gouguet, *De l'évaluation des grands événements sportifs*. *La Coupe du Monde de Rugby 2007 en France*, Pulim. 2010.

Eric Barget et Jean-Jacques Gouguet, *Evénements sportifs : impacts économique et social,* De Boeck, Bruxelles, 2010.

Eric Barget, Fabien Clipet, Jean-Jacques Gouguet et Céline Vial, *Manifestations équestres et développement local,* IFCE, Paris, 2016.

Holger Preuss, *Economics of the Olympic Games 1972-2000,* Walla Walla Press, Sydney. 2000.

Andrew Zimbalist, *Circus Maximus,* Brookings Institution Press, Wash. DC, 2015.

Related articles: cost-benefit, evaluation, externalities, legacy, social utility, value.

The economic weight of sport: an imperfect solution?

Definition

The question of how much sport 'weighs' in an economy seems quite legitimate. Everyone says that sport plays a very important role in all societies. However, it is necessary to be able to demonstrate this, which is not easy given the availability of information. Furthermore, it appears that the concepts used must be clearly specified. In particular, it is essential to avoid the confusion that is commonly made between economic weight and economic impact: economic weight simply measures the volume of activity represented at a given time by a sector, an industry or a company, and can be expressed in many different ways; economic impact is based on growth theories and measures, in a given territory, the potential increase in net wealth created by a demand shock.

The economic weight of sport can be assessed using several types of measures: non-monetary measures (number of clubs, number of members, number of jobs, number of spectators, etc.); monetary measures (turnover, added value, revenue, expenditure, income, etc.). It is the monetary measures that are generally requested, but they are relatively easy to implement because of the availability of data. The most immediate measure refers to the method of calculating GDP, which amounts to using value-added. This method is difficult to envisage given the accounting nomenclatures which are not adapted to the measurement of a phenomenon as specific as sport, other measures are necessary. Finally, it must be stressed that evaluating the weight of sport in an economy by a single monetary figure does not make much sense in itself. The usefulness of such an evaluation lies in reasoning in relative terms: comparisons in time (is the economic weight of sport increasing or decreasing?); comparisons in space (is the economic weight of sport more or less important in France, compared to other major nations?) This explains the efforts made in several countries to experiment with different measurement methods.

Satellite account

The national account budgets do not allow crosscutting phenomena such as sport, culture, the environment, etc., which were, therefore, the subject of original attempts to construct satellite accounts in the 1970s. The aim was to gather the information that was scattered in the central account and reorganise it coherently. Applied to sport, three options were considered to solve the problem of articulation with the national accounts:

- the integration of the satellite account into the national framework. This solution has the advantage of overall coherence but has the disadvantage of limiting the consideration of the specificities of sport since it has to fit into the categories of national accounts;
- the autonomy of the satellite account relating to the national framework. In contrast to the previous solution, what is gained in specificity is lost in coherence;
- an intermediate solution between integration and autonomy.

Whichever option is chosen, the French and European experiences show that numerous difficulties stand in the way of the development of a satellite account for sport.

Industrial cluster

We will refer here to the Canadian work using national accounting to evaluate the place of sport in the economy other than from the economic circuit. The Canadian authors start from the logic of inter-industrial matrices à la Léontieff and use the concept of industrial clusters, which group together industries linked by buying and selling relationships around a central activity. From this, it is possible to identify those industries that are most interdependent and that constitute the core of the cluster. To establish the results, simulations were carried out: assuming an increase in demand for the sports industry, what are the effects on the other industries? For example, the shock to the sporting goods industry clearly shows the sectoral interdependence, with the other manufacturing branches in the lead, followed by the tertiary sector (wholesale trade, insurance, finance, transport, services, etc.), and finally, but to a lesser extent, the primary sector (forestry, livestock, etc.); the shock to the sports services sector shows the sectoral interdependence of the other branches (finance, insurance, public services, wholesale trade) and, to a lesser extent, with the two other sectors (primary and secondary).

This method also makes it possible to estimate the weight of the sports economy in Canada, but it is not possible to compare these results with those obtained in other countries since the methods used to obtain them are different. The need to develop an internationally standardised method to allow comparisons of the relative weight of sport in national economies is again apparent. This also applies to the analysis in terms of industrial clusters, which seems difficult to transpose to the French case, where we have tried to develop an analysis in terms of a meso economic system.

The economic sector of sport

The previous notion of cluster refers to the work of industrial economics, which considers the sectors as a way of dividing up the productive system, and mainly analyses the purchase-sale relations between the branches of an economy. Another conception of the commodity chain is to define it as an eco-system of relations defined by reference to the agents' strategic fields of action. Such a definition of the industry considers agents fulfilling very different functions (production, distribution, finance, etc.) but sharing a common interest: the practice of sport is at the centre of the sector, and changes in this area have important consequences for the other levels of the sector; the production of sporting equipment to meet the above-mentioned demand is shared between the public and private sectors according to the opportunities for profitability; the production and distribution of sports articles depend largely on the terms of international competition.

From this instrument, it is possible to follow the strategies of the different actors who are trying to adapt to the changes in the practice of sport in the context of the globalisation of the economy. It is not up to us here to judge the relevance of this instrument which, as always, depends to a large extent on the quality of the sports information that can be mobilised, hence the need to develop genuine economic observatories for sport.

National sporting expenditure

Given all the difficulties mentioned, the French Ministry of Sports pragmatically proposed to evaluate the economic weight of sport by summing up the expenses of the actors involved:

- Household spending on sport: purchase of services (tickets, courses, memberships, etc.), purchase of goods (clothing, shoes, sports equipment, etc.);
- Government expenditure on sport: salaries, subsidies, etc. ;
- Corporate sports expenditure: broadcasting rights, sponsorship, etc.

This methodology has been critically reviewed:

- There are still many double counts, which lead to an overestimation of the real expenditure (for example, in public expenditure, if the region subsidises the sports expenditure of a municipality).
- Conversely, certain expenses are not accounted for, such as the provision of personnel and sports facilities by local authorities.
- Other expenditures can be ignored such as tax expenditures, social security expenditures, and non-sports business expenditures.

The modification of the evaluation of the economic weight of sport in France, taking into account these different elements, did not greatly modify the final result, as both the under- and over-evaluations of certain expenses according to the methods used seem to compensate each other. On the other hand, the most important conclusion is that, if the amount of the nation's sporting expenditure remains stable (around 1.8% of GDP), its structure has evolved with, in particular, the decrease in public expenditure.

Further information:

Richard Arena, Laurent Benzoni, Jacques de Bandt et Paul-Marie Romani (Dir.) : *Traité d'économie industrielle*, Economica, Paris, 1991.

Commission Européenne, *Sport Satellite Accounts. A European Project, new results*, 2013.

Bruno Dietsch, *Estimer le poids économique du sport : méthodologie*, INJEP, notes et rapports, Août 2018.

Perrine Goulet, *Le financement des politiques sportives en France. Bilan et perspectives,* Rapport à l'attention du Premier Ministre, septembre 2018.

Related articles: evaluation, economic impact

Chapter VII – The social function of sport

Beyond its economic dimension, sport provides the host territory with a certain number of social externalities (insertion, conviviality, citizenship, well-being, education, health) which contribute to its net social benefit. Some dimensions of this social utility of sport will be more or less easy to quantify. Such quantification is not impossible by the use of monetary evaluation, but there is a risk of impoverishing these notions: what does the monetary evaluation of the social tie mean, for example? This is why a new social accounting of sport must be developed and the quantitative approach must be completed by a qualitative approach.

Volunteering: how to assess the value of volunteering in sport?

General issues

Voluntary work is one of the human activities that have an undeniable aura. Indeed, we can only admire all those who put themselves at the service of others without asking for remuneration in return. Volunteering would thus be the bearer of values that are too often forgotten in a productivist world: mutual aid, solidarity, cooperation and altruism. In addition, from a social and cultural point of view, volunteering is a source of economic and social cohesion: inclusion, social bonding, well-being and citizenship. Nevertheless, from a strictly economic point of view, volunteering, by definition, belongs to the category of externalities, which will lead to a certain number of difficulties and controversies regarding its measurement.

Sport is particularly concerned by this issue of evaluation. Indeed, without volunteers, the French system of sports organisation would be in great danger. Let us recall that in France sport is still considered a public good with a strong commitment from the public authorities for its regulation and financing. Faced with the current relative disengagement of the State, the sporting movement fears an increased recourse to market mechanisms through public service delegations and privatisations. The consequence could be a risk of dualisation between the commercial sector and the federal sector, between solvent and insolvent participants, between the professional and the amateur world, and between efficient urban areas and rural or urban depressed areas. It is to be feared that the market will not be able to respond to all the demands of disadvantaged publics or territories, all the things that the sporting movement was able to do thanks to public support and voluntary work. It is in such a context that the question of the evaluation of the weight and value of volunteer sport arises.

The sporting movement wants the services rendered by all its volunteers to be recognised in their rightful place for two essential reasons:

- Volunteering creates economic value thanks to all the externalities linked to the practice of sport: health, education, social integration, diversity, etc.
- Volunteering saves society a great deal of money compared to situations where payments would have to be made to service providers.

Such an assessment of the weight and value of volunteer sport is, however, fraught with problems given the gaps in the information available.

Physical assessment of volunteering: the specificities of sport

The weight of volunteering can be measured in three different ways: the number of volunteers, the number of volunteer participations or the number of hours of volunteer work. According to the latest CRA-CSA 2017 survey [Prouteau, 2018], the number of volunteers is estimated at 22 million, i.e., a volunteer rate in France of 43%, and the number of volunteer participation is estimated at 33 million, as the same volunteer can make several participations. It is important to note that this volunteer work is highly concentrated, with only 15% of volunteers doing more than 80% of the work.

However, all these estimates should be taken with a pinch of salt, as they are based on the quality of the surveys carried out either amongst volunteers or the structures hosting volunteers. There are therefore significant differences in the assessment of the weight of volunteering since a Ministry of Education survey detected 13 million participants in 2017 [Bastien, 2019].

Ranked by field of activity, it is the defence of rights, causes and interests that come out on top (23% of participation), followed by social, charitable and humanitarian activities (20%), then sport and leisure activities (17% each), with culture representing 12% participation. Beyond this relative weight of sport volunteering, it is interesting to note the specificities in the profile of sport volunteers compared to other sectors:

- It offers more regular participation than occasional participation, unlike the leisure sector for example.
- It is characterised by the longest participation period (over 10 years).
- There are twice as many males as female volunteers (which is the largest disparity compared with other sectors).
- It is younger than in all other sectors.
- Their participation is not related to their level of education.

The second way of estimating the weight of volunteering is to evaluate the number of hours that volunteers have devoted to it, which can then be transcribed into the number of FTE jobs (full-time equivalent). According to the CRA-CSA survey, the overall volume of volunteering in 2017 was between 1,320,000 and 1,460,000 FTE jobs, mainly in associations. Sport would account for about 20% of this, with social and charitable action coming in first place with 25%. If on average, a volunteer spends 68 hours a year on active participation, sports volunteers spend 81 hours, in second place behind social activities (95 hours) but far ahead of leisure activities (48 hours) and culture (60 hours).

As with the determination of the number of volunteers, these figures should be treated with restraint. However, they relate to elements that are relatively simple to evaluate: number of volunteers and number of hours of participation. This makes it difficult to assess the monetary value of volunteers.

Monetary evaluation of volunteering: the ambiguities

The monetary evaluation of voluntary work poses many methodological problems for the economist. We find the same difficulties as those encountered, for example, in the evaluation of domestic work, which has given rise to numerous disputes between experts. There are two methods of evaluation, either at market prices or cost factors:

- The evaluation at market prices consists in determining for a service rendered by the 'housewife' or 'homemaker' (ironing, cooking, etc.) how much it would have cost if it had been done through the market (dry cleaning, restaurant, etc.).
- Factor costing involves choosing the rate at which the homemaker would have been paid if a salaried worker had performed their task.

The latter is the most common method used to estimate the monetary value of volunteering. It is called the replacement cost method. It calculates how much the service would have cost the volunteer's host organisation if it had been provided by a paid worker. This method is based on more or less reliable assumptions:

- It is not certain that the employee and the volunteer have the same productivity. Therefore, there may be cases of over or under-estimation of the replacement cost.
- It is always difficult to choose a reference salary: minimum wage? The average salary of the sector of activity concerned?
- Should the salary be differentiated according to the nature of the task performed by the volunteer?

All these choices are not neutral and they allow us to understand the great variability in the estimates of the monetary value of volunteering. There are two examples of rare attempts made in France to evaluate volunteerism in sport [Bastien, 2019]:

- Kurt Salmon published a study in 2014 on behalf of the French National Olympic and Sports Committee (CNOSF). Based on an estimate of the number of jobs FTE jobs that volunteering would represent (i.e. 300,000), the firm used two reference salaries. By using the minimum wage, the value of volunteering amounts to 7.5 billion euros, when including the average wage in sports associations, it amounts to 11 billion euros.

- The Centre de droit et d'économie du sport (CDES), at the request of the CNOSF in 2018, proposed another evaluation also based on an estimate of the number of FTE jobs (i.e. 274,000) and using two reference salaries: either the 2018 SMIC, which results in an evaluation of the voluntary work of 5.2 billion euros or the average salary of the sporting sector in 2018, which gives an amount of 10.1 billion euros.

Other scenarios are available and they always show a wide range of estimates depending on the assumptions made. This has led some economists to question the finality of such a calculation: what is the point of using a monetary indicator to evaluate volunteering with its replacement cost by a salaried worker? Wouldn't it be better to think about the value of the service provided by the volunteer?

The need for further research on volunteering

From an economic standpoint, volunteering is still one of the phenomena that deserve more attention at a time when societal upheavals are in preparation in the face of the risks of the collapse of the thermo-industrial civilisation. Indeed, we urgently need to reimagine the world now before reaching irreversible thresholds with global warming or the biodiversity crisis. In this perspective, volunteering and the values it brings are to be promoted in order to rethink the ‘good life’ together. Indeed, it is a question of promoting new values to replace the struggle of all against all, the permanent economic war, by cooperation, mutual aid, conviviality and solidarity, of which volunteering is a good example.

Here we find the proponents of the current thought of convivialism. Let us recall that the first Manifesto (Declaration of Interdependence, 2013) drew a new doctrine of social organisation around four principles: the principle of common humanity which must be respected for everyone, regardless of race, nationality or gender; the principle of common sociality according to which true wealth resides in the relationships between people; the principle of individuation which allows each person to develop his or her capabilities; the principle of controlled opposition which authorises conflict while ensuring that it does not drift into destructive violence. In the second Manifesto (For a Post-Neoliberal World, 2020), a fifth principle of "common naturalness" and the meta-principle of hubris control was added. Humanity's survival could only be achieved by respecting nature and living by limiting our desires. All these principles should, in theory, guarantee a good life together. The question is to know, in practice, how to make this construction desirable for the greatest number of people, but also to show how it is possible.

Volunteering fits perfectly into this search for a societal alternative, particularly because it is representative of a symbol that could be at the centre of the social organisation of the future: gratuity [Ariès, 2011]. This would call into question money, wealth, growth and progress, which have been and still are sacred in our productivist societies of competition and performance. On the other hand, a gratuity would allow us to re-engage with an ideal of family relationships, associations, neighbourhoods and the sharing of common goods. In short, gratuity frees us from the imperialism of the economy and the market. This means that it reveals a value that is not that of the price born of market exchange. This is a classic debate about value in economics and the distinction between value and price. The market value of volunteering is not necessarily what should be measured from a societal alternative perspective. On the other hand, it would be much more interesting to try to understand the value of the services rendered by volunteers in terms of health, education, citizenship, integration, social ties, etc., in fact, everything that constitutes the social utility of sport.

Further information:

Paul Ariès, *La simplicité volontaire contre le mythe de l'abondance*, La Découverte. Paris, 2011.

Internationale Convivialiste, *Second manifeste convivialiste. Pour un monde post néolibéral,* Actes Sud. Arles, 2020.

Internationale Convivialiste, *Premier manifeste convivialiste. Déclaration d'interdépendance*, Le Bord de l'eau. Lormont, 2013.

Jérémie Bastien, « Bénévolat sportif. Enjeux et limites d'une quantification », *Jurisport,* n°195, Dalloz, Mars 2019.

Centre de Droit et d'Economie du Sport, *Le mouvement sportif : quels effets sur la société française et son économie*, Note pour le CNOSF, Non publié, 2018.

Lionel Prouteau, *Le bénévolat en France en 2017. Etat des lieux et tendances*, Rapport de recherche à partir d'une enquête menée par le Centre de recherche sur les associations et Consumer Science and Analytics, 2018.

Viviane Tchernonog et Lionel Prouteau, *Le paysage associatif français. Mesures et évolutions,* 3ème édition, Dalloz, Juris Associations, 2019.

Related articles: sports employment, evaluation, externalities, economic weight of sport, social utility, value.

Cost-benefit: towards recognition of complementarity between quantitative approach and qualitative approach of the sporting phenomenon?

A monetary calculation

Cost-benefit analysis is a decision-making tool developed to optimise the use of scarce resources to meet human needs. Thus, the decision of whether or not to engage in a given project will require measuring its benefits and costs, and it will be considered legitimate if the decision-maker anticipates a net benefit. In the case where several projects are in competition and all show a net benefit, the choice will be made for the one with the highest net benefit. This general principle applies to both public and private decisions.

Decision-makers commonly use cost-benefit analysis because this method has proven its operationality. It has been strongly influenced by neoclassical theory and has undergone a twofold evolution. Initially, it was part of the unicriteria methods relating solely to the monetary evaluation of market exchanges. The cost-benefit calculation concerned only the tangible effects of the project, i.e., those that belong to the market sphere and do not pose major evaluation problems. In a second phase, it was necessary to integrate the non-market effects (externalities) which are much more difficult to evaluate.

The solution has been to establish shadow prices using specific methods of preference revelation (substitution markets, contingent valuation, monetisation of physical effects). The principle is always the same: the preference of individuals is used as the basis for measurement and it is assumed that this preference is reflected in a willingness to pay. The amount that people are willing to spend on a good or service would be a better indicator of the utility they attach to it. The sum of individual willingness to pay provides the total economic value of the goods or service in question.

Such an evaluation of externalities has been strongly contested insofar as certain costs and benefits are not quantifiable in monetary terms or, for which monetary quantification makes little sense. How much is the deterioration of a country's image following the organisation of a major contested sporting event 'worth'? How much is the improvement in the quality of community life following the hosting of a successful sporting event 'worth'?

For this reason, such a monetary assessment has been increasingly discussed by economists for several years. One of the most emblematic elements of the debate is certainly the reappraisal of the gross domestic product (GDP) as a measure of a nation's standard of living.

Criticisms of monetary evaluation

It was thus realised that GDP was not a good indicator because it does not allow a measure of well-being; it does not measure social inequalities; it does not allow a fair measure of environmental costs. All this means that wrong decisions have been made based on this indicator. There has been debate amongst experts (e.g. around the Stiglitz et al. report [2009]) as to what could replace GDP to improve decision-making. This debate has been structured around two questions:

- Is it necessary to construct a new synthetic indicator of sustainability? The best known is certainly the ecological footprint, which is a departure from monetary indicators. Many other indicators of this type have since been constructed: human development index, social health index, happiness index, vulnerability index, Happy Planet Index, Genuine Progress Indicator, etc.
- Should a dashboard be developed? This involves choices: How many indicators? How to choose them? Should they be prioritised? Everyone presently agrees that we should not multiply the number of indicators.

Whatever option is taken, the real problem seems to us to lie in the choice between monetary or non-monetary indicators. This involves a real choice for society and is not just a simple technical option. This is what is at stake in the construction of new indicators to measure what really counts: the quality of human relations, education, health, etc. Developing new indicators and new accounting systems is urgent. We need additional benchmarks for further policies in the service of a new social project. Material development is only one component, amongst many others, of a nation's wealth. Thus, in the Gross National Happiness indicator used in Bhutan, four dimensions are taken into account: the conservation of nature, the promotion of culture, the development of a sustainable economy and good governance of institutions.

The restoration of quality

Beyond monetary/non-monetary opposition, there is another divide with the quantitative/qualitative opposition. Indeed, there are dimensions of societal life that are rather difficult to quantify: social ties, quality of life, social recognition, quality of human relations, etc. Quantification is not impossible, but there is a strong risk of diminishing the content of these notions. It is therefore recommended that monetary cost-benefit analyses be supplemented by happiness measurements based on satisfaction surveys that allow comparisons to be made between areas where the units of measurement are different. The economics of happiness thus offers a simpler measure than the monetary value of the agents' willingness to pay. This is why economists are now suggesting that quantitative indicators should be supplemented by qualitative analyses. The latter takes the form of interviews that make it possible to identify field experiences in detail and to make a judgment on the social utility thus identified. Thanks to this type of analysis, it is possible to obtain a more serious measure of the depth of reality than with a large number of statistical indicators.

We must insist on the complementarity of these two approaches and above all avoid denigrating one in the name of promoting the other:

- For a very long time, quantitative indicators were favoured for their ‘scientificity’ even though they could be reductive. Whether at the level of researchers or decision-makers, quantification still holds a certain fascination. It gives the impression that decisions can be made on a scientifically sound basis.
- Qualitative evaluation, which is more common amongst social scientists and ethnologists, has had a much harder time penetrating the field of economic analysis. Indeed, the subjectivity of such an evaluation has always been a problem for economists, who need quantitative data to test models.

Multi-criteria analysis: an alternative?

Given the failure of monetary instruments, new analyses were developed, in particular multi-criteria analyses. From a theoretical point of view, we find here all the influence of the criticisms made of the concept of rationality and its use in economic science. With the work of Herbert Simon, the principle of "limited rationality" began to be accepted, making it possible to understand that "the one best way" is a utopia. Experience shows that decision-makers settle for the first satisfactory solution that comes along rather than the best one that they may never achieve. It is no longer a question of finding the best solution as in the cost-benefit calculation, but of informing choices.

This is why the multi-criteria methods that appeared at the end of the 1970s as a reaction to neo-classical analysis were intended to be instruments to assist collective negotiation. The aim was not so much to measure the effects of a project but rather to serve as a negotiation. To do this, the methods had to be adapted to such a development. The multi-criteria analysis of a project consisted of several stages: identification of the actions to be carried out; determination of the assessment criteria; evaluation of the actions;

weighting of the criteria; aggregation of the particular measures; comparison of the variants.

The same methodological problems are still present: scoring, weighting, aggregation, and comparison, but the originality of the multi-criteria approach is that it allows stakeholders to participate at each of these stages. It is no longer a question of imposing a technocratic or scientific study, but, through a broad participatory process, of bringing out a compromise that takes into account the preferences of all the actors concerned.

It must be acknowledged that multi-criteria analysis also poses formidable methodological problems and has not succeeded in supplanting cost-benefit analysis. The traditional calculation in monetary terms is still mainly used by economists as a decision-making tool and sport has not escaped this.

Social profitability of the sporting spectacle

Prior to hosting mega-sporting events, a social profitability calculation including all the costs and benefits, both tangible and intangible, should be systematically carried out. Unfortunately, decision-makers do not commission such studies, which would be very long and costly, and are satisfied with lighter but more questionable justifications. This calculation of social profitability takes a back seat to a calculation of economic impact used to justify the legitimacy of the project, which is not correct. The calculation of economic spin-offs only makes it possible to measure the extent of the impact (added value or employment) of the event on the region. This calculation cannot in any way be used as a decision-making tool on its own. There is, therefore, a twofold insufficiency in this type of approach: on the one hand, the ex-ante impact calculations are often wrong and generally overestimated yet, on the other hand, the assimilation of a calculation of economic impact to a calculation of profitability is completely illegitimate.

The social profitability of the event should also now include all the externalities linked to the environment. For example, the priority of combating climate change will require a review of our models of generalised mobility, particularly air transportation. This could lead to considerable changes in the organisation of mega-sporting events such as the Olympic Games. Should we abandon the idea of organising major events in places that are far from the dominant geographical origins of spectators? Should airlines be required to internalise their costs? Should spectators be made to pay an eco-tax? It is, therefore, necessary to educate public opinion about the need to introduce eco-taxes, as well as political decision-makers so that they have the political courage to push for them. It is thus clear that the solutions to the current global challenges cannot be technical. The most urgent thing is to change behaviours and values in order to bring about a new model of social organisation, which could completely challenge the design of mega-sporting events.

We believe that all these evaluations should not be based on a single cost-benefit calculation made by experts. Indeed, the externalities linked to mega-sporting events are such that their evaluation is not possible in a satisfactory manner. A negotiated solution based on a citizens' conference seems preferable.

Further information:

Wladimir ANDREFF and Stefan SZYMANSKI (eds*), Handbook on the Economics of Sport,* Edward Elgar, Cheltenham, 2006.

Eic BARGET et Jean-Jacques GOUGUET, *Evénements sportifs : impacts économique et social,* De Boeck, Bruxelles, 2010.

Jean GADREY, Florence JANY-CATRICE, *Les nouveaux indicateurs de richesse,* La Découverte, Paris, 2005.

Michel GARRABÉ, *Ingénierie de l'évaluation économique*, Ellipses, Paris, 1994.

Bernard ROY, *Méthodologie multicritères d'aide à la décision*, Economica, Paris, 1985.

Claudia SENIK, *L'économie du bonheur*, Seuil, Paris, 2014.

Jean SIMOS, *Evaluer l'impact sur l'environnement. Une approche originale par l'analyse multicritère et la négociation*, Presses Polytechniques et Universitaires Romandes, 1990.

Joseph STIGLITZ, Amartya SEN et Jean-Paul FITOUSSI, *Rapport de la commission sur la mesure des performances économiques et du progrès social,* La Documentation Française, Paris, 2009.

Related articles: evaluation, externalities, legacy, economic impact, the future of sport, social utility, value.

Evaluation: what decision-making tools are at the heart of sporting policies?

Definitions

It is not easy to define what exactly is meant by the term evaluation. Indeed, it is used to designate a multitude of operations ranging, for example, from quality control of an administrative service or a product to the evaluation of personnel or the impact study of a new law. In the limited framework of this article, we are left with the evaluation of projects, plans, programmes, or policies in the field of sport. It seems that there is no real consensus amongst researchers on the nature of evaluation, its field, the theoretical instruments to be used, the indicators to be constructed and the types of calculations to be made. This is why we start with two commonly accepted general definitions:

- Evaluation is the set of analyses, methods and behaviours that allow us to understand why and how objectives are achieved or not, by the means that are assigned to them.
- Evaluation is also a reflection that must explain how priorities are defined and chosen, how means and financing are determined and selected, how constraints (regulatory, temporal, financial) impose certain choices, how political ambitions must be translated into different standards, how, once these choices have been made and financing defined, actions are implemented, in time and space, with operators and operations.

On reading such a definition, which underpins an entire scientific research programme, it is clear how difficult the exercise is. To try to build an operational approach, it is necessary to reduce such complexity by starting from the recognition of a real life cycle of a project, a programme or a policy based on three phases: development, execution and results. At each of these three stages, it is necessary to carry out a specific evaluation, commonly referred to in the case of public policy evaluation as a strategic evaluation, an operational evaluation and an outcome evaluation. In the field of sporting project evaluation, we will confine ourselves to strategic evaluation (ex-ante) and outcome evaluation (ex-post), the latter being conceivable in the short and long term.

- **Strategic evaluation**: it aims to analyse the project's stakes, make the objectives and means explicit, to reveal the underlying strategy. It is a question of assessing the relevance of the actions undertaken by the decision-makers. Here we find analyses in terms of opportunity cost: would my investment not have been more beneficial in another project? For example: should a football World Cup be held in South Africa in 2010 or in Qatar in 2022? Should we have given up on the construction of the French Rugby Federation's mega stadium? The question is what was the quality of the evaluation that underpinned such decision-making? Strategic evaluation poses many methodological problems that have often led to a real distortion of the exercise. For example, to assess the relevance of hosting a major sporting event, an economic impact study has been substituted for a social profitability study, which is not legitimate.

- **Results evaluation**: it aims to measure the impact of the projects or programmes on employment, income, wealth, well-being and the economic development of the territory concerned. Such a calculation can be made in the short or long term. For example, it is customary to consider a 17-year life cycle for the Olympic Games: a 7-year pre-Olympic period between the date of the award of the Games and the year of the Games; the year in which the Games are held and the legacy after the Games stretching over a 10-year period. For Paris 2024, CDES, in its ex-ante study, retained the three phases 2017-2023; 2024, 2025-2034. These three phases will of course be reassessed after the end of the Games. To carry out such an impact calculation, there are many methods available, all of which pose difficulties that are, more or less, easy to solve.

Methodological issues

Both types of evaluation (ex-ante and ex-post) pose specific methodological problems. For the ex-post evaluation, we refer the reader to the article on economic impact.

For the strategic evaluation, it seems to us that it is the most decisive but also the most delicate moment of the overall evaluation of a project. It is a matter of determining whether the actions undertaken are relevant to the issues, objectives and priorities discussed during the development of the project. It is often said (by decision-makers) that the evaluation must be neither a judgement nor a court of law questioning the competence of the actors or the legitimacy of the choices made. Whatever the reasons for such an attitude (which risks considerably restricting the field of evaluations), it seems to us that the question that cannot be ignored is: whether the actions taken are the right ones?

To answer such a question on the relevance of the actions, it is necessary to first reflect on the stakes of the project or programme evaluated, its objectives and priorities. It is at this level that the theoretical underpinnings of the proposed actions can be appreciated, which, beyond the sporting dimension, are centred around employment, economic development and economic and social cohesion. It is therefore important to assess whether the action programme is pertinent to the objectives, i.e., whether it is genuinely based on an analysis of the match between these actions and the objectives to be achieved.

Many controversies have arisen around this evaluation of the project's relevance. In particular, it is a question of knowing who should pronounce on such relevance, and consequently, two types of evaluation can be envisaged: an external evaluation carried out by experts; an internal evaluation carried out by decision-makers. Here again, these two types of evaluation can be considered complementary, the first giving a rather technical vision while the second inevitably integrates institutional and political dimensions. Whatever the formula adopted, it is impossible to avoid the fact that the actors involved in the strategic evaluation will have to make value judgements. The question then arises as to the type of norms against which such assessments are to be made, and controversy may arise in this regard:

- Can we consider that there are theoretical models that have governed the decision-making? It would then be sufficient to compare theory and reality to validate or not the decisions. There are many examples to illustrate the theoretical origin of certain actions: the role of transport infrastructures in economic development, the basic nature of certain activities (tourism, sport, export industries, etc.), the importance of the spatial proximity of economic activities, etc.
- Conversely, should we consider that the proposed actions result from the decision-makers' beliefs, which thus constitute a model? What is tested would not be the direct result of a theoretical model but rather the consequence of the decision-makers' adherence to a certain number of beliefs that are more or less scientifically validated but which have seduced them.

The first case would be an expert assessment and the second would be a decision-maker's assessment. It is not for us to determine which is the best way to proceed, but it is necessary to be aware that the nature of the evaluation will be completely different:

- Assessing the legitimacy of actions in the light of a theory comes down to judging the usefulness of said theory in the development of a policy, which, scientifically speaking, may shock the most positivist. The positive/normative quarrel can be found in economics. Nevertheless, this approach can be very practical in the event of an unfavourable evaluation as it is the theory that will be called into question, not the decision-maker!
- Assessing the relevance of a programme to the beliefs of decision-makers is more consistent with policy evaluation but

more dangerous for decision-makers who may be challenged through their proposals. Nevertheless, this procedure can be an instrument of progress by encouraging the abandonment of outdated beliefs and the adoption of a new value system more in line with current reality.

These two conceptions of evaluation should be carried out together, as they are not completely independent of each other. There is no pure form of evaluation: a theoretical model always contains largely explicit values, whereas beliefs always have a more or less distant link with a theoretical model. Yet, whatever the mode of evaluation, there is always an unresolved question about the step from evaluation to decision-making. It does not seem legitimate to us to go directly from one to the other without providing for a phase of negotiation between all the parties concerned by the project, especially the citizens.

From evaluation to negotiation

- ***Citizens' conference***

One way of improving the social acceptability of hosting mega-sporting events would be to get all the actors around the negotiating table. A public debate should be envisaged, insofar as the organisation of such events is not only a sporting matter but involves real social choices. Experience shows that if properly trained and informed, a panel of citizens can give opinions that are just as relevant as those of patent experts. These citizens' conferences are consultative mechanisms set up within small groups of people solicited by the public authorities to give a reasoned opinion on controversial projects or issues.

Citizens' conferences were born out of the observation that scientific expertise was being instrumentalised to serve private interests, following a number of scandals (contaminated blood, mad cow disease, asbestos, etc.). Moreover, to inform the decision of elected officials, the usual procedures have proved ineffective: referendums, surveys, public debates, and public enquiries. Conferences have been set up since the 1970s to compensate for these various shortcomings, mainly in Northern European countries, but since then have gradually extended to other regions.

To be successful, a citizens' conference must meet a certain number of conditions and, in this case, it becomes, alongside experts, elected officials and the associative movement, the fourth partner traditionally neglected in the elaboration of public choices. Thanks to the participation of ordinary citizens, participatory democracy has been set up to compensate for the laxity of representative democracy. The hosting of mega-sporting events could then be the subject of citizens' conferences on the most controversial points, such as the measurement of the intangible legacy, the social utility or the opportunity cost of these organised events.

- ***Olympic games***

The main criticism levelled at the hosting of these mega-sporting events now concerns their excessiveness. A citizens' conference could be tasked with analysing the scope of this criticism around four questions:

- What are the consequences of organising such an event from an economic, social, ecological and geopolitical perspective? The citizens will be informed by the best experts on the global impact of the event with a convincing justification of the results, a discussion on the controversies of the methods and the difficulties of measuring the externalities.

- For whose benefit and to whose detriment is the event being hosted? This implies a reflection on the people affected, on the rights that are often flouted and on the most disadvantaged populations during the organisation of mega-sporting events.

- What are the nature and consequences of the decision-making process? The citizens' conference will have to pronounce on the relatively democratic character of the decision-making process, the risks of corruption, etc.

- What is the overall project for hosting the event? The success of a mega-sporting event depends above all on its inclusion in a regional project. Territorial foresight exercises are necessary, for example, with the creation of scenarios. It is widely acknowledged that too many long-term decisions have been taken far too lightly.

Further information:

Jean-François Bourg et Jean-Jacques Gouguet, *Economie politique du sport professionnel. L'éthique à l'épreuve du marché*, Vuibert, Paris, 2007.

Conseil scientifique de l'Évaluation, *Petit guide de l'évaluation des politiques publiques,* La Documentation Française, Paris, 1996.

Joan Herman, Lynn Lyons Morris et Carol Fritz-Gibbon, *Evaluator's Handbook,* Sage Publications, London, 1987.

Stéphane Paul, Hélène Milet et Elise Crovella, *L'évaluation des politiques publiques. Comprendre et pratiquer*, Presses de l'EHESP, Paris, 2016.

Société Française de l'Evaluation, « L'évaluation participative : de la prise en compte des publics au pouvoir d'agir citoyen », *Cahiers de la SFE*, n°9, décembre 2015.

Jacques Testart : *L'Humanitude au pouvoir. Comment les citoyens peuvent décider du bien commun*, Seuil, Paris, 2015.

Related articles: cost-benefit, externalities, legacy, economic impact, social utility, value.

Externalities: how to define and internalise the effects linked to the sporting spectacle?

Definitions

The notion of external effects was introduced into economic theory by Alfred Marshall who, to explain the increasing returns in industry, put forward two elements: internal economies of scale (size of the production apparatus) and external economies of proximity (the industrial district). Subsequently, economists will have ever more recourse to this notion with the rise of environmental concerns and the appearance of negative externalities linked to it. It was Cecil Pigou in particular who, as early as 1926, proposed the internalisation of negative externalities by introducing a tax equal to the value of the damage caused. It was not until Ronald Coase and his Social Cost Theorem (1960) that another form of internalisation was introduced through the negotiated exchange of property rights on the market.

Sport has not evaded this issue. It produces positive externalities (social peace, social ties, job creation, etc.) but also negative ones (hooliganism, doping, etc.). Remember that an externality is the impact of an individual's actions on the well-being of others, without this impact being taken into account by the market. If this impact is negative, it is called a negative externality or external diseconomy; if the impact is positive, it is called a positive externality or external economy.

Applying this definition to sport, amongst the most representative positive external effects, we can retain certain social consequences of sporting practices such as the improvement of health, the extension of life expectancy, the reduction of absenteeism, sick leave at work, social integration and the reduction of social pathologies. At the level of the sporting spectacle, the improvement of the social link, the national identity and the image of the host territory are usually considered. Amongst the most significant negative externalities are: the damage caused by sporting activities in sensitive natural areas or by mega-sports events in natural areas (noise, erosion, trampling, pollution, etc.); certain consequences of intensive sporting activities (doping, accidents, illnesses, etc.); nuisances linked to the presence of large infrastructures (noise, visual nuisance, urban integration, etc.); nuisances linked to the sporting goods industry (pollution, etc.). As this field of externalities is too broad to be dealt with in this article, we will limit ourselves solely to the example of the sporting spectacle. For the externalities linked to sporting practices, we refer the reader to the article "value".

- ***Positive externalities***

Overall, the sporting spectacle produces two main types of positive externalities: social ties and territorial dynamics.

The social tie created during a sporting spectacle depends on the size of the event, the type of sport and the public it attracts - including its location. It can nevertheless be admitted that sporting events generally improve social cohesion, community spirit, and even produce social recognition (ethnic minorities, young people from underprivileged areas, women, etc.). This is due to the fact that sport conveys universal values that can be disseminated on a large scale thanks to the media.

In terms of territorial dynamics, externalities can take the form of positive social consequences resulting from the economic impact of the sporting spectacle (reduction of tensions linked to unemployment, delinquency, drugs). These externalities can also consist of the improvement of the brand image of the territory from both an economic and social point of view, which can reinforce its attractiveness. There is also a sense of pride amongst the local population that can be a factor in improving productivity, as well as synergy effects because the sporting spectacle can bring together actors who are not normally used to working together.

- ***Negative Externalities***

As before, these also concern social relations and territorial dynamics but affect them negatively.

The negative impact of the sporting spectacle on social cohesion takes the most common form of hooliganism but also of the loss of credibility due to covert abuses (doping, cheating). Thus, the sporting spectacle either reveals the rejection of others or relegates sport to being just another economic activity.

From the point of view of territorial dynamics, negative externalities take many forms: expropriation of residents and destruction of working-class neighbourhoods; forced displacement of the population as well as spatial segregation and gentrification.

Modalities of internalisation of external effects

- ***Constraints***

Both sporting and non-sporting institutions can use a variety of instruments to internalise sporting externalities. Traditionally, a distinction is made between regulatory instruments (standards, authorisations, bans, etc.) and economic instruments (taxes, subsidies, loans, etc.). We will confine ourselves here to giving just a few illustrations of these instruments.

Since the 1st World Conference on Sport and the Environment held in Lausanne (1996), the IOC has officially embarked on a policy of internalising environmental externalities in several ways: raising awareness of environmental issues at all levels of the Olympic family; taking the environment into account in the awarding of the Olympic Games through the Olympic Charter, and complying with the Sustainable Development Goals (SDGs) established by the UN.

The international federations have affirmed their desire to impose new environmentally-friendly operating rules on their affiliated national federations. The proposals concern, for example, the choice of location for mega-sporting facilities; measures to limit and strictly regulate competitions in the natural environment; the grouping of sporting facilities for energy-saving and proximity purposes; the revision of the formats of sporting competitions to minimise travel and reduce greenhouse gas emissions; the integration of the environment in the specifications for the organisation of mega-sporting events (water, energy, waste, transport).

At the European level, one could imagine a system of equalisation between professional and amateur sport. As the sporting-spectacle industry benefits greatly from the externalities generated by amateur sport, it may be legitimate to set up equalisation instruments between these two sectors. Two sources of revenue could be taxed: sporting abuses (doping, lack of academies in clubs, speculative player transfers, etc.) and commercial products of the sporting spectacle (TV broadcasting rights, by-products, sponsorship, sport betting). Yet such a system does not exist!

- ***Voluntary agreements***

It is certainly in the direction of voluntary agreements that the organisers of sporting spectacles should commit themselves to in order to give credibility to competitions marred by multiple allegations of doping, match-fixing, fixed betting, corruption, etc. The organiser would undertake to respect a charter or code of good conduct. In such a context, doubts may arise about this type of instrument, which is considered to be intended to divert the vigilance of consumers and public authorities. This means that to be effective, voluntary commitments must meet at least two conditions:

- it is necessary that third parties exert credible threats: spectator boycotts or suppression of sponsor support.
- the implementation of actions must be monitored by independent inspectors and a sanction mechanism must be established in the event of non-compliance. We are therefore seeing increasing non-governmental organisations (NGOs) (WWF, Greenpeace, etc.) taking part in monitoring operations, for example, for the Olympic Games. In the event of non-compliance, the organiser runs the risk of a media campaign that would damage its reputation. Nike has experienced this concerning the issue of child labour.

Further information:

Jean-François BOURG et Jean-Jacques GOUGUET, *Economie du sport*, Repères, 3ème édition, La Découverte, Paris, 2012.

Julie DUCHÂTEL (Dir.), *La coupe est pleine ! Les désastres économiques et sociaux des grands événements sportifs*, Genève, CETIM, 2013.

Gregory MANKIW, *Principes de l'économie*, Economica, Paris, 1998.

Related articles: cost-benefit, evaluation, legacy, economic impact, social utility, value.

The future of sport: what sport in a world of degrowth?

General issue

It is not possible to think about the future of sport without thinking globally about a new social project. Indeed, the current dominant economic model has reached a dead end and there is still no consensus on an alternative. Perhaps the global pandemic of COVID-19 will accelerate the realisation that its origin lies in the destruction of natural resources by an economic system dominated by the search for maximum short-term financial profitability. All recent global pandemics (AIDS, Zika, Ebola, SARS, H1N1, etc.) have originated in the animal kingdom due to the disappearance of ecosystems that bring us closer to animal reservoirs and, to widespread mobility - which facilitates epidemics. The main factors at the origin of zoonoses are therefore well known: the destruction of nature, intensification of agriculture, industrial meat production, and trade in wild species. This systematic destruction of life is not sustainable and we must break with this capitalist system dominated by a logic of short-term profitability.

Beyond this crisis of life, there is also the denial of the question of planetary limits. As Kenneth Boulding pointed out, "anyone who thinks that infinite exponential growth is possible in a finite world is either a fool or an economist". The planet is reaching thresholds of irreversibility with global warming or the collapse of biodiversity, which calls into question its habitability for the human species.

The whole issue of social choices is therefore raised in a new way. In a world of growth, it was possible to satisfy all the demands in terms of transport, education, health, housing, leisure, etc. In a limited world, it is a zero-sum game that is required, hence the question: how to make trade-offs? This question is all the more difficult to resolve because it is necessary to take into account the will of public opinion and decision-makers to implement, or not, a sustainable economic model. If we refuse to change our lifestyles, we come back to Cournot's conclusion in 1830 in his work on the coal question: either we burn everything, which is the end of civilisation and colossal; or we manage the coal stock as a good parent to ensure that future generations benefit as much as possible. If we accept a new model of sustainability, we will clearly have to accept the consequences. The world's resources are shrinking, with a number of peaks that cannot be resolved (oil, fossil resources, metals, arable land). We will therefore have to give up certain types of consumption and ask ourselves how to organise this degrowth:

- Some choices will be relatively easy to make and they will be possible at an individual level (reducing the consumption of meat, fish, milk, eggs or food waste).
- Other constraints will be much more difficult to accept, such as the reduction in long-distance mobility (air travel, sea cruises) or the purchase of a large car (SUV).
- Beyond individual choices, social choices will also be fairly easy to make by populations, countries, institutions and companies whose interests are threatened.

In the end, degrowth risks being partly liberticidal compared to our current world of unlimited growth, i.e., without constraints. From this, two questions arise: what global project for society? What consequences for sport?

A new global project for society

In the years to come, three elements will be at the heart of the reconstruction of our societies: consideration, sobriety and relocation.

- ***Consideration***

This first principle consists in recognising the planetary limits and the need to finally stop the destruction of nature. We must reconnect with nature and respect it. This question of the limits to growth is not new in economic thinking, but it was certainly the Meadows report of 1972 that gave the first warning. It clearly stated that the planet's carrying capacity would be exceeded, but the tone of the report remained resolutely optimistic. In 1972, there was still no awareness of the urgency of the situation and the catastrophe was thought to be in the long term.

In 1992, these forecasts were updated at the Rio World Conference, the second Earth Summit, following Stockholm in 1972. Even then, it appeared that the planet's carrying capacity had been exceeded due to deforestation, climate change, loss of biodiversity, etc. However, the authors of the 1992 report were also optimistic that the world economy would be able to be kept within the limits of sustainability. This hope was deflated with the insufficient results of Agenda 21 set up after Rio, followed by the failure of the Johannesburg conference in 2002. Today, the authors are more pessimistic and regret that we have wasted about thirty years. This is also the meaning of the warning issued in 2017 by the international scientific community. No one today can say that we did not know. Nor can it be said that the decision-makers did everything in their power to avoid the catastrophe. The active denial of the environmental issue on the part of decision-makers is impressive and the way out of the crisis will require a public debate on two essential points: the determination of a hierarchy of needs according to the limits of the planet and the modalities of implementation of a resilient territorialised economy.

- ***Sobriety***

The notion of need is central to economic analysis, even though there is no in-depth study of this concept. It is a simple fact that human needs are unlimited in the face of scarce resources to satisfy them. It is, therefore, necessary to make choices where rationality is ensured by the economic calculation of maximisation under constraint.

At the social level, this gap between unlimited needs and scarce resources poses the problem of setting priorities and the hierarchisation of needs. How can we draw the line between the useful and the futile? We always come back to the problem of the finality of economic activity. We must recognise that the driving force of capitalist society is not the need to be satisfied - but profit. As a result, a minority decides for the majority which needs to satisfy according to the logic of profit. Therefore, it is necessary to dispose of a production oriented not towards what is useful but towards what is profitable. Once again, we find the paradox of value shown by the gap between use value and exchange value. Jacques Ellul had thus denounced the multiplication of gadgets, that is to say, goods that have a high exchange value despite a use value close to zero.

However, we must not remain solely at the level of supply and ask ourselves what the demand is for the productive sector. The important thing, in the context of scarce resources, is to determine what our essential needs are. Three organisational principles can underpin a new social construction: sobriety, i.e., limiting our needs; productive efficiency, i.e., savings in production; and the use of renewable resources while respecting their renewal rate. It is the first point on sobriety that is being debated. The objective is to reduce our ecological footprint to less than one planet, which means sorting out our consumption. This brings us back to the problem of the democratic determination of needs to decide what is superfluous and what is necessary.

- ***Relocation***

Our economies now operate on a just-in-time basis, tens of thousands of kilometres away. Stocks have not disappeared, but they are constantly circulating in planes, boats, trucks and trains. This widespread mobility is no longer sustainable in an era of dwindling energy resources and accelerating global warming. Moreover, this functioning of the global economy has led to a very great interdependence of national economies relative to each other. This is always a consequence of Ricardo's theory of comparative advantages, which justifies globalisation. Such interdependence can be very dangerous if one part of the sector supply chain fails. Accordingly, all our economies have become very vulnerable.

It would be desirable to set up a new productive system that is both resilient and sustainable, which implies a relocation of the global economy. Such a change is difficult to envisage in the context of a liberal economy of generalised competition between countries and with fiscal, social and environmental dumping. Rather than seeking maximum competitiveness at all costs, it will be necessary to build resilient and autonomous territories that allow basic needs to be met. This restructuring will not happen instantly and small-scale experiments are desirable. In France, for instance, they could be part of a radical reform of regional planning. Instead of large metropolitan areas, which are increasingly unviable in a time of global warming, we could imagine a network of small, dense cities linked by a public transport system. On this territorial scale, it is possible to organise short supply circuits with agro-ecological production. Other basic needs can also be equally satisfied at the local area level: education, health, leisure, housing, and above all, social ties.

Consequences for sport

Three dimensions will heavily impact the organisation of sport using this new model: mobility, competition and practice.

- ***Mobility***

Primarily, amongst the numerous problems, is the carbon footprint of mega-sporting events, which depends largely on mobility. For example, for the 2010 football World Cup in South Africa, international transport alone accounted for 67.4% of the total carbon footprint used in the mobility of players and spectators. It is in such a context of questioning generalised mobility that it is interesting to analyse prospective work on the evolution of lifestyles in France in 2050, in relation to global warming [IDDRI, 2012]. Five scenarios have been constructed and can be grouped into three sets:

1 - The headlong rush. These first two scenarios are those in which we do not want to give up consumption and comfort. The sporting spectacle is maintained. There are no restrictions on mobility through supra-national regulations to combat global warming. Moreover, performance remains at the heart of the system, especially in the second scenario, which could see competitions open to cyborgs. Nevertheless, mobility is becoming increasingly expensive and is reserved for the elite, who do not necessarily want a sporting spectacle. Under these conditions, the profitability of such an event is questionable.

2 - The transition. Here, we have a plural society in which a part of the population leaves the productivist way of life to adopt a

degrowth lifestyle in rural areas. The other section of the population lives in urban areas. The global sporting spectacle is no longer possible because of the high cost of long-distance mobility. We could, logically, see the disappearance of competitive sport, either out of necessity because of the energy shortage, or out of a change in values brought about by the alternativists and in particular the questioning of performance at all costs.

3 - The paradigm shift. By the 2030s, there will be a growing awareness of the need to regulate all common goods. It is the implementation of environmentally friendly lifestyles with the abandonment of air transport, the individual car and the adoption of reasonable consumption and reduced mobility. In all cases, travel becomes rarer, slower and longer. The ethic of voluntary simplicity is becoming more widespread - by necessity. The search for performance is no longer at the heart of society. In such a context, the sporting spectacle is bound to disappear.

- ***Competition***

We must invent a new economic system based on values other than those of productivism. In particular, cooperation must replace competition. This means putting an end to the quest for competitiveness at any price with fiscal, social and environmental dumping in the context of a merciless economic war between nations. This idea of cooperation was introduced by Pierre Kropotkin (1938), who reformed Charles Darwin's thinking on the survival of the fittest. Indeed, mutual aid is much more widespread in nature than competition. The species that are able to cooperate survive best in a crisis or shortage. Competition is deadly, and conversely, cooperation allows everyone to survive. The liberal ideology based on competition is, therefore, based on an erroneous idea.

Faced with the current civilisational crisis, to rebuild society, researchers grouped in the doctrine of conviviality have proposed a second Manifesto of convivialism entitled "for a post-neoliberal world”. It proposes building a new world around five primary objectives: the fight against hubris and the reduction of inequalities; the relocation of the world economy; the preservation of the environment centred around new lifestyles; the reintegration of those excluded from the labour market; the mastery of technology, especially artificial intelligence.

In such a society built on the principle of cooperation, sporting competition could disappear and be replaced by 'playing'. This would be a return to ‘the game’ after its disappearance at the time of the industrial revolution of the 19th century in England and its replacement by ‘sport’. Unlike the game, in which the aim is the simple pleasure of participating, sport and especially the sporting spectacle imposes the need to win or to maximise performance. It could therefore impose a new concept of sporting practice.

- ***Sporting practice***

We must hope for the advent of a new model of social organisation based on the ideas of sobriety, conviviality and cooperation, and move away from the current model of the 'war of all against all'. In this perspective, the practice of sport and the values it conveys can contribute to the establishment of such a model, which requires a fundamental change in individual behaviour.

One of the greatest obstacles to these behavioural changes is the fear of the defenders of Progress who are scared of returning to the dark ages. Many people are not prepared to give up their cars, televisions and telephones to adopt a more frugal lifestyle for the sake of future generations. We must therefore insist on the fact that the renunciation of gadget consumption can be largely compensated for by eco-compatible relational activities. In part, it would be sufficient to encourage a shift in demand from traditional goods with a high negative ecological impact to environmentally friendly relational goods to maintain a high level of well-being while at the same time assisting in the reduction of GDP.

The just and sober society to be built is not a return to the past but the implementation of an alternative, vibrant and enriching model. It is only in this way that meaning can be restored to the many lives that are solely focused on consumption. From this perspective, the consequences for the sporting spectacle are considerable. Today, we need popular education movements to transmit other values necessary for harmonious good living together, rather than the spectacle of a few indecently overpaid stars. The great sporting events would then give way to disinterested sport simply for pleasure, health, conviviality and self-fulfilment and no longer for gain, records or victory at all costs.

Further information:

Philippe Bihouix, *L'âge des low tech. Vers une civilisation techniquement soutenable*, Seuil, Paris, 2014.

IDDRI (2012) Institut du Développement Durable et des Relations Internationales, « Mode de vie et empreinte carbone. Prospective des modes de vie en France à l'horizon 2050 et empreinte carbone », *Les cahiers du club d'ingénierie prospective énergie et environnement*, n°21, Décembre 2012.

Internationale convivialiste, *Second manifeste convivialiste. Pour un monde post néolibéral*, Actes Sud, Arles, 2020.

Baptiste Morizot, *Manières d'être vivant*, Actes Sud, Arles, 2020.

Baptiste Morizot, *Raviver les braises du vivant. Un front commun,* Actes Sud, Arles, 2020.

Pablo SERVIGNE et Gauthier CHAPELLE, *L'entraide, l'autre loi de la jungle*, Les Liens qui Libèrent, 2017.

Pablo SERVIGNE, Raphaël STEVENS et Gauthier CHAPELLE, *Une autre fin du monde est possible. Vive l'effondrement (et pas seulement y survivre)*, Seuil, Paris, 2018.

Related articles: global public good, cost-benefit, opportunity cost, valuation, legacy, economic impact, social utility, value.

Social utility: how can the social functions of sport be measured and recognised?

General definition

Social utility is a very difficult concept to define because it is eminently subjective. Moreover, it competes with many other concepts that are close to it: common good, general interest, social responsibility, happiness, well-being and public utility. It is therefore necessary, on one side, to define the nature of social utility and, on the other, to specify its content.

- ***Nature of social utility***

Researchers agree that the term 'social utility' attached to an association or a project refers to the collective benefits they bring, thus making it possible to justify tax exemptions or diverse forms of support:

- The first collective benefit is macroeconomic: the social disutility avoided. The first example is the activation of passive expenditure on unemployment. An unemployed person returning to work pays taxes, pays social contributions and consumes. It no longer costs society to do nothing. The expenses incurred can thus generate a net social benefit. The value of the service provided by a rehabilitation association is measured by this benefit. Then there is the example of structures for the integration of young people in difficulty, which will make it possible to avoid the social costs associated with delinquency, drugs, dropping out of school, etc. Finally, there is the example of ecological associations which generate social benefits thanks to the actions carried out against environmental degradation.
- The second collective advantage is microeconomic. It is the production of local social ties in a given area. For example, when a social integration enterprise opens a solidarity restaurant in a disadvantaged neighbourhood, beyond the meal provided, it recreates a public link of conviviality. This is an externality attached to the meal sold. The same could be said of various local shops, which then produce social utility alongside their economic activity.

- ***Content of the social utility***

Social utility refers to various activities belonging to different fields. From an economic point of view, activities that make it possible to satisfy the essential needs of people who are not able to pay (housing, training, childcare, etc.), or to contribute to the development of a territory are considered to be of social utility. From a social aspect, these are all activities aimed at fighting exclusion and inequality, improving social ties or improving participatory democracy. From an ecological point of view, social utility activities include all actions in favour of the preservation of natural resources or the fight against global threats (global warming, biodiversity crisis).

It is in this very general context of defining social utility that the collective benefits of sport must be placed.

The social function of sport

- ***European white paper***

In its White Paper on Sport (2007), the European Commission defined the societal role of sport - for the development of this sector in the Member States - around eight objectives: improving public health through physical activity; joining forces to fight doping; fostering the role of sport in education and training; harnessing the potential of sport for social inclusion, integration and equal opportunities; strengthening the prevention and repression of racism and violence; sharing our values with other parts of the world and supporting sustainable development.

We find in these objectives all the elements characterising the general approach of social utility as a collective advantage: either at the macroeconomic level with the social disutility avoided since sport can help avoid delinquency, drug and alcohol consumption, as well as various pathologies such as obesity, or at the microeconomic level since sport generates social ties, integration and education, beyond its main function around competition or physical activity.

The implementation of this White Paper will be based on new partnerships, with new audiences and in new territories.

- ***New partnerships***

There could be four institutional privileged partners: health, education, social action and urban policy, and justice. In France, it is historically difficult to implement transversal policies that transcend strong administrative cultures. It will therefore be essential to reflect on the ways in which a sporting culture, which is too self-centred on the sole purpose of competition, can be opened up. It will be necessary to raise awareness through training operations, with stakeholders of the sporting movement, on the social utility of sport. If the future of sport is to be based not only on competition but also on its social utility then new project leaders will be needed in sports associations. This implies new training courses for sports managers to allow for the diversification of club activities, contrary to the current hyper-specialised and competition-oriented diplomas.

- ***New audiences***

An improvement in the knowledge of the accessibility to sport of a certain number of the underprivileged public seems essential. There are indeed black holes in the precise knowledge of social categories with limited access to sport: senior citizens, prisoners, young people from the neighbourhoods, unemployed, immigrants, disabled people, sick people, etc. Field surveys or local observers should be promoted to fill these information gaps. On this basis, it will then be possible to evaluate the social utility of the sporting practice.

- ***New territories***

This is the challenge for sport and intercommunality. In this perspective, a typology of these territories is necessary to take into account their respective specificities: deep rural; rural in the area of attraction agglomeration; rural structured by a small town; medium-sized cities; agglomerations; metropolises. Territorial plans for sport are to be developed at each of these levels for equipment, training and supervision. The objective is to maximise the social utility that each territory will be able to derive from it given its specific issues.

Key lessons

- ***A problem of evaluation***

The recognition of the social utility of sport will require an improvement in the evaluation of its effects. We must be able to determine the total economic value created and therefore the profitability of public funds invested in sporting policies. Moreover, this would make it possible to avoid falling into a certain angelism. It is not enough to assert that sport is favourable to social inclusion; it must be proven and measured. Studies using labelled methods would be necessary on this point.

This brings us back to the eternal problem of knowing how to measure the qualitative, the subjective, and the non-market. Moreover, what sense can we make of a monetary evaluation of social utility? Perhaps we need new benchmarks for other policies in the service of a new social project. Social utility is at the heart of this debate with three conditions to be fulfilled: an ethical requirement around the idea of social justice; a democratic requirement around a citizen construction of indicators plus an experimental requirement around the integration of field innovations.

- ***A problem of culture***

If we leave a purely economic logic in terms of efficiency and competitiveness, the problem of the social utility of sport becomes fundamentally cultural. The welcoming of new audiences or the development of new types of activities is a matter of debate within the sporting movement. First of all, it is necessary to know if the sector is capable of being efficient in taking care of very specific audiences. Interesting experiments are currently taking place in the health and social integration fields. There are still many other groups to be integrated. The question is then to know if it is fundamentally the role of the sporting movement to provide such services that are more oriented towards social utility than competition. A double debate will certainly need to be pursued: on the legitimacy of using sport to serve other functions and, on the capacity of the sporting movement to adapt to such a social demand.

In the end, the challenges for sport in the coming years seem to be clear. The social functions fulfilled by sport are recognised. Hence the question: how can these new social utility missions be linked to the services traditionally provided by the sporting movement around competition?

Further information:

Jean GADREY, L'utilité sociale des organisations de l'économie sociale et solidaire, Rapport de synthèse pour la DIES et la MIRE, Février 2004.

Alain LIPIETZ, Pour le tiers secteur, l'économie sociale et solidaire. Pourquoi et comment, La Documentation Française, Paris, 2001.

Dominique MEDA, Qu'est-ce que la richesse ? Aubier, Paris, 1999.

SOCIÉTÉ FRANÇAISE DE L'EVALUATION, « L'utilité sociale. Un métacritère d'évaluation dynamique », Les Cahiers de la SFE, n°10, mars 2016.

Related articles: cost-benefit, valuation, externalities, legacy, economic impact, value.

Value: a new decision-making tool based on the total economic value of the sporting spectacle?

The paradox of value

Value is at the heart of what constitutes the very essence of economic analysis: what are the foundations of value? What is the relationship between value and price? The first question relates to the opposition between utility value and labour value. For neoclassical economists, the value of goods depends on the utility that each individual attaches to it and thus conditions the willingness to pay. For the Classicals or Marxists, the value of goods depends on the amount of work required to produce it. This opposition between utility value and labour value culminated at the end of the 19th century in the "quarrel of methods" and saw the triumph of utility value with that of the methodological individualism that became the standard of scientificity in economics. The second question deserves particular attention insofar as it is common to observe divergences between value and price, which reveals market failures if we remain within the framework of neoclassical economics.

Traditionally, economic analysis is used to distinguish between use value and exchange value: use value is the subjective utility attached by an individual to goods and the satisfaction he derives from their use. It is a value that does not necessarily require the existence of a market and exists for an individual isolated from his fellow men; exchange value is the objective measure of the capacity of goods to be exchanged for other goods on a market. It is therefore a social value. The price is an expression of exchange value.

From there, we find the paradox of value when we compare these two elements: some goods can have a very high use value and a zero exchange value (and vice versa). This paradox is known in economic literature as the water-diamond paradox. While the former has a high use value (water is life), it has a very low exchange value. For the latter, its very high exchange value is not justified by its utility. This paradox has been resolved in the history of economic analysis by taking into account both the utility and the scarcity of goods. Nevertheless, economic theory has been primarily concerned with exchange value. The objectivity that presides over its determination was more in keeping with a research programme that claimed to be scientific, but it is at this level that one of its main weaknesses lies. Perhaps other social choices would have been made if economists had paid more attention to use value rather than systematically seeking to produce what could be sold for profit without considering the utility of what was put on the market. This is why, in recent years, with the growing awareness of the scarcity of resources on a global scale, there has been an attempt to reconsider the issue of value. This has given birth to new concepts that are overturning the economic calculation. Let's take the example of the sporting spectacle.

Total economic value of the sporting spectacle

- ***Definitions***

The use value corresponds to the actual utility felt by the consumer of the sporting spectacle. The willingness to pay is partly revealed by the expenditure for access to the spectacle (tickets) or various purchases. By reconstructing the demand curve for the event, it is then possible to calculate the consumer surplus.

The intrinsic value or value in itself of a good is its value when not in use. How much are goods worth even if you don't use them? Applied to the sporting spectacle, it is the utility that an individual derives from knowing that this spectacle exists, with all that this can represent from an economic, social, cultural and symbolic viewpoint, even if he does not attend the event.

Option value refers to a good that does not have a high use value today but may have a high value tomorrow. Individuals may wish to preserve the option to use these goods in the future. This is the case for the sporting spectacle, where the aim is to preserve the option of its organisation to avoid its disappearance.

Legacy value is the value attributed to giving up the immediate use of a good for the benefit of future generations. For the sporting spectacle, it essentially measures the value that can be attributed to the sporting culture as a heritage of humanity.

The sum of all these values gives the total economic value of the sporting spectacle. As many of these values are non-market, economists have tried for the last thirty years to experiment with various methods to reveal the agents' willingness to pay, which is not without a certain number of difficulties.

- ***Methods***

Several methods have been developed by economists of revealing and evaluating the preferences of individuals as a means to assess the value of the environmental externalities. These methods from environmental economics were then transposed to the field of sports economics:

- Substitution markets: the preferences of individuals concerning the environment are evaluated by examining their behaviour in three markets linked to the environment: transport (costs), protection (expenditure) and housing (hedonic prices). The travel-cost method has been most widely used in the field of sports economics.

- Hypothetical markets: also known as the contingent valuation method (CVM), are increasingly used to estimate the intrinsic or potential value of environmental goods. It is called a direct method because it seeks to find out directly the preferences of individuals and their willingness to pay by way of questionnaires and interviews. This method has been used to assess the non-market value of mega-sporting events such as the Rugby World Cup or the Davis Cup.
- Indirect methods: the aim is to calculate a dose-response relationship and then to carry out a monetary evaluation of the physical effects. These methods have been used in the context of the relationship between sport and health or in the analysis of the environmental consequences of mega-sporting events.

All of these methods are attractive in theory, but they present difficulties in application, especially at the level of information collection. Moreover, the results obtained by different methods cannot be compared and, at the level of the same case study, the results may differ considerably depending on the method used. These methods must therefore be the subject of much transparency in the presentation of research protocols. On this condition, it is possible to put the results into perspective, in order to become aware of all the biases inherent in all these methods and to conclude that it is better to have an imperfect method than no method at all. This implies, however, that it may be dangerous to move directly from an assessment to decision-making without considering a negotiation between the stakeholders involved. Furthermore, it is all the more important to carry out this calculation of the total economic value as it is possible to obtain a different typology of sports events than that obtained with the criterion of their economic impact.

From economic to social

- ***Another typology of sporting spectacles***

The legitimacy of hosting a sporting event is usually assessed by the extent of its economic impact. This criterion is considered sufficient to demonstrate to public opinion the relevance of the decision. Sports economists have long denounced the insufficiency of this reasoning and have instead recommended a calculation of social profitability extended to externalities and using this notion of the total economic value of the sporting spectacle. Such a calculation would be desirable to improve decision-making and avoid expensive mistakes, such as the organisation of the football World Cup in South Africa and Brazil, or the hosting of the Winter Olympics in Sochi.

By cross-referencing the results in terms of economic impact and social profitability, a new typology of the sporting spectacle emerges. Obviously, the ideal is to have an event with high social profitability and a strong economic impact. Conversely, it is not desirable to support the organisation of an event with low social profitability and little economic impact. Beyond these two obvious cases, there are two very interesting situations. Firstly, there are events with a low economic impact but a high social utility. This is the case for most of the world championships in 'minor sports', which do not have a significant economic impact but which play an essential role in the dissemination of sporting values. Secondly, there are events with a high economic impact but low social utility. These are sporting events that generate strong negative social or environmental externalities. In the latter case, the Sochi Olympic Games and the Paris-Dakar rally are emblematic examples.

- ***The need for collective bargaining***

The ex-ante social profitability calculation is not carried out for many reasons: such an evaluation of externalities would be long and costly; a simple economic impact calculation is much easier to carry out; such an impact calculation generally gives a positive view of the event with results that are often overestimated; the social profitability calculation risks tarnishing the event's reputation in the event of significant negative externalities.

Therefore, it seems unlikely that public commissioning of ex-ante studies on the social profitability of sporting events can be envisaged at a time when it is still difficult to demand serious economic impact studies. The solution may be to make decision-makers aware of the existence of negative externalities that could jeopardise the social profitability of the event. The aim is not to carry out a true cost-benefit study but to make decision-makers aware that there are other criteria to take into account than just the simple economic impact. This can also lead to an awareness of the need for collective negotiation to avoid going directly from an economic calculation to a decision.

Further information:

Eric Barget et Jean-Jacques Gouguet, *Evénements sportifs. Impacts économique et social,* De Boeck, Bruxelles, 2010.

François Bonnieux et Brigitte Desaigues, *Economie et politique de l'environnement*, Précis Dalloz, Paris, 1998.

Philippe Bontems et Gilles Rotillon, *L'économie de l'environnement*, Repères, La Découverte, Paris, 2013.

Bernd Süssmuth (ed), "Hosting Mega-Events : a Regional Perspective", *Région et Développement*, n°31, L'Harmattan, Paris, 2010.

Related articles: cost-benefit, evaluation, externalities, legacy, economic impact, social utility.

CHAPTER VIII – SPORTING ABUSES

The list of abuses threatening sport is growing. Doping, fixed betting, match-fixing, corruption, tax havens, money laundering, etc. These multiple cases of abuse threaten the integrity of the sporting competition and sustain a climate of suspicion, which in the long term can lead to the disaffection of the public, sponsors and patrons concerning an activity that is no longer ethically acceptable.

Doping: a product attached to competition?

Definition(s)

It was not until the 20th century that the terms 'doper' and 'dopage' appeared in the French language, in 1903 and 1921 respectively. They derive from the English terms 'to dope' and 'doping' used from 1889 onwards to designate, in the context of horse racing, the techniques used to modify the performance of a horse. The absence of a universal and unambiguous definition of doping requires a clarification of the concepts that characterise doping practices. First of all, it should be noted that the use of methods known as 'doping' takes place in the context of a sporting activity, even if societal developments have led to a broadening of this qualification to include all human activities.

In fact, doping has no legal meaning and is only punished in sport. Doping was formalised in the 1960s with the first laws prohibiting and sanctioning it. What does have legal meaning is defined by the World Anti-Doping Code of the World Anti-Doping Agency (WADA) in its articles 1 and 2 [WADA, 2020, p.18-27]. Doping in the legal sense is proven if there is a violation of one or more of the eleven listed anti-doping rules, such as; testing positive, unable to be located for a test, falsifying or attempting to falsify a test, evading a test, possessing a prohibited substance or method.

The act of doping is characterised by three criteria: the effectiveness of the device used (unfair practice), the damage to health (in the short, medium and long term) and ethics (contrary to sporting spirit). However, all high-level athletes use artificial devices – whether legal or illegal – in response to the IOC's supreme injunction "faster, higher, stronger". Like physical or mental preparation, dietetics or technical training, doping is one of the many ways to 'get the job done'. The determination of what is or is not authorised, relating to the three criteria already mentioned is both mutable and questionable.

Legal and illegal forms of doping

The division between legal and illegal doping is somewhat arbitrary and underlies several issues. With the basic principle of the WADA World Code that doping only occurs in relation to a rule indicating the prohibited devices, all substances or methods not on this list are permitted, including doping products that, although not prohibited, are effective and dangerous. In addition, all the anti-doping test results are negative as long as the thresholds are not exceeded, even if prohibited products have been consumed. In addition, since doping substances have differing detection windows, athletes can stop their use in time to avoid a positive test.

In addition, some substances are prohibited in competition, but accepted in training (cocaine, corticosteroids). Many illegal products are tolerated - even though the health problem may be fictitious - when they are covered by a therapeutic use exemption (TUE). Prohibited but still undetectable substances are widely used (autologous blood transfusions, generic EPO). Unknown products, or those in the clinical trial phase and therefore not having received marketing authorisation (MA), are much sought after by athletes.

There are several forms of doping: known and identifiable doping; legal doping with TUEs, non-prohibited doping processes and illicit substances tolerated up to certain thresholds; doping processes that are undetectable or masked by other legal or unknown products; undetected doping with unidentified substances; and doping that is not sanctioned because of a technicality or failure to prosecute.

The extent of doping depends directly on the definition given to the phenomenon. For 'official' doping (offences recorded in the application of the World Anti-Doping Code), the average proportion of 'abnormal test results' recorded by WADA varies between 0 and 2%. Alternatively, for ‘functional’ doping (medicalisation of sports performance outside of any therapeutic indication), the vast majority of the professional elite seem to be involved.

The framework for economic analysis

Doping can be considered as one of the inputs of a production function, complementary to talent, physical, physiological, psychological and mental aptitudes, the output of which is the performance obtained thanks to an illicit external contribution. Sporting excellence comes from the combination of these production factors, which are complementary rather than substitutable. Indeed, training patterns, season preparation and goal planning are closely associated with doping protocols.

The professional athlete confronted with the issue of recourse to drugs evolves in a particular environment. Their career is short, precarious and uncertain. The winners, benefiting from worldwide media exposure, are endowed with an exceptional market value and have access to the best performance products in minimising the risks. All athletes know that they competing within three categories of athletes: those who do not or no longer dope (a minority), those who dope in an artisanal, imprudent and not very effective way, and those who dope scientifically with undetectable and effective synthetic molecules (the majority of the elite).

The athlete must make a choice: use some of the methods listed by WADA, with the risk of being caught during a test and sanctioned, or not use them, which means that the athlete is handicapped insofar as victory and records are determined by a very small difference, less than 0.5% in most disciplines, whereas the use of certain doping methods can increase his or her performance by 3 to 10 %.

The risk of a positive doping control is very low because information asymmetries are a permanent feature of doping behaviour, with a time lag between the start of the use of illicit drugs by athletes, the date of their suspension by the sports authority and their possibilities of being tested. Information is both imperfect and asymmetrical since the athlete knows their doping protocol much better than the doping control authority. Finally, the risk of being sanctioned athletically and criminally is very low.

The microeconomic analysis of doping

The characteristics of doping are captured by two bodies of standard theory [Dimant and Deutscher, 2019; Daumann, 2018; Harms and Kaiser-Jovy, 2018]: an illegal action with the transgression of a rule by the theory of the economics of crime [Andreff, 2019]; a strategy to gain a competitive advantage by game theory [Eber, 2018, 2008].

The theory of the economics of crime

According to the classical approach of consumer rationality, which seeks to maximise an objective function (utility) under budgetary constraints (scarcity), the athlete is led to choose the optimal allocation of his or her resources based on a cost-benefit calculation. Gary Becker's work on the economics of crime [1968], makes it is possible to say that each athlete - assumed to be free and independent - will evaluate the costs of doping against the risks of testing positive and consequently being sanctioned or of becoming ill, as well as the financial gains and notoriety obtained, and compare them with the costs and benefits of an alternative and legal allocation of his resources.

The athlete will commit this cheating if the net expected utility (difference between benefits and costs) is greater than the disutility of doping (risk aversion, fear of dishonour and unethical behaviour). According to rational choice theory, depending on the results of this cost-benefit calculation, the athlete decides whether to dope or not.

Such a method underlines the existence of a choice to be made between the return on this investment in human capital (doping protocols, preparation schemes) and that which would be obtained by using these resources for other activities. Between personal interest and morality, between the successful sporting career and the length of lifespan, between the short term and the long term, between present, immediate and future goods.

Game theory

Game theory can be defined "as the mathematical tool for analysing strategic interactions between individuals, especially when they have divergent interests..." [Eber, 2018]. Game theory sheds new light on the utilisation of the individual rationality postulate. Individual rationality always commands an economic agent to adopt the best response to the environment in which he or she is placed. The 'common knowledge' of this rationality allows each actor to anticipate the rational behaviour of the other agents while anticipating the fact that the latter are capable of rationally anticipating theirs.

In the sporting domain, the performances obtained depend on the behaviour of all the competitors, oriented in their choice by a search for competitiveness so as to obtain a differential advantage. Several hypotheses are put forward based on the application of game theory and the 'prisoner's dilemma' to doping [Eber, 2018; 2008]. The athlete has a choice between doping and not doping. Doping is efficient, or at least the athlete imagines it to be. The athlete acts rationally to achieve a goal. The preferences and strategies used by athletes, regardless of their ethics, lead to widespread doping when athletes are unaware of the actual prevalence of doping, when the probabilities of detection and sanction in case of a positive test are low, and when the financial, media and symbolic incentives to perform are strong.

Doping thus becomes the dominant strategy, with everyone anticipating that the other will dope. The health risk is uncertain and remote, and the probability of being found out and punished is low. Then again, not doping is equivalent to a certain exclusion from the competition for victory. Without doping, the winner would be the same and the various financial and health costs could have been avoided. Each athlete would have an interest in avoiding illegal behaviour but adopts it anyway despite everything to protect himself from a possible betrayal of the agreement.

The institutional analysis of doping

According to this heterodox approach, the primary fact is not the freedom of individuals to act rationally, but that their behaviour and the consequences of their choices are overdetermined by macroeconomic constraints. The aim is not to understand the logic of the economic process from the perspective of the rational behaviour of individuals, but to understand how the institutions governing the economic system limit the social actors' room for manoeuvre.

In the field of sport, the collective takes precedence over the individual, because the participants are rooted in a highly structured and relatively stable environment. The act of doping appears to be the consequence of a complex chain of events generated by the collective organisation of the sporting spectacle [Bourg, 2019; Bourg and Gouguet, 2017]. Additionally, the act of doping is the translation of an incompressible and unavoidable risk linked to the very nature of the sporting competition. In this new age of televised and commercialised sport, the professional athlete attempts to obtain material and symbolic gains, while equally trying to respect sport's internal logic. They make the necessary sacrifices to be recognised, overcome the difficulties of their profession, pursue their dream and thus fulfil the terms of their (implicit) work contract.

The costs and benefits of doping are so high that they are necessarily the result of a collective process involving various actors who invest their knowledge and their expertise. The conditions of doping practices are systemic in nature and result from the coordinated action of medical personnel, specialised chemists, training technicians, intermediaries connected to mafia networks, jurists qualified in sports law, etc. Recurrent doping scandals have highlighted the 'visible hand' of institutions through explicit or implicit collusion between all the public and private actors of the sporting spectacle industry, whether it be doping organised by the State (East Germany, West Germany and the USSR during the 1970s-1980s; Russia and China from the 2010s onwards, etc.) or by the market (Festina in 1998, BALCO in 2003, Puerto in 2006, Lance Armstrong/US Postal in 2012).

Lessons and further thoughts

Is the ultimate explanation of doping to be found at the level of the individual behaviour of athletes, assuming that they are guided by the search for the maximum or minimum of an objective function (price/cost), or even at the level of their aggregation? How can the athlete who dopes be considered as homo economicus, when the predominant behaviour is not that of an isolated agent but organised doping?

Similarly, the hypotheses of game theory through the 'sportsman's dilemma' are insufficient to determine strategic choices in interactive decision-making situations based on purely rational considerations, whereas massive doping practices organised in clandestine networks are not integrated, and doping exists in many professional or amateur sports with very low potential of symbolic or material gains.

The theorisation of doping is not yet stabilised. The microeconomic approach leads to indeterminacy and is unable to account for the complexity of the phenomenon. The market certainly offers the freedom to choose, but also to deceive and to be deceived. The challenge of understanding the logic underlying contemporary competitive sport, as well as the underlying causes of doping behaviour, is important to try to define more effective anti-doping policies than those that have been implemented, without any real success, for half a century [Bourg, 2019].

We can therefore hope for a deepening, an extension and a diversification of the application of the theoretical apparatus offered by economic analysis to such a singular activity. Doping in sport could thus allow a new look at the standard hypotheses of economic theory.

Further information:

AGENCE MONDIALE ANTIDOPAGE, *Code mondial antidopage 2021*, AMA, Montréal, 15 juin 2020.

Wladimir ANDREFF, *An Economic Roadmap to the Dark Side of the Sport*. vol I*: Sport Manipulations*; vol II*: Corruption in Sport;* vol III*: Economic Crime in Sport*, Palgrave. Mac Milan, Cham, 2019.

Jean-François BOURG, *Le dopage*, série économie, collection Repères, La Découverte, Paris, 2019.

Jean-François BOURG et Jean-Jacques GOUGUET, *La société dopée. Peut-on lutter contre le dopage sportif dans une société de marché ?* Seuil, Paris, 2017.

Gary S. BECKER, "Crime and Punishment: An Economic Approach", *Journal of Political Economy*, vol 76, n°2, 1968.

Frank DAUMANN, "Doping in High-Performance Sport. The Economic Perspective", in Markus Breuer and David Forrest (eds), *The Palgrave Handbook on the Economics of Manipulation in Sport*, Palgrave Macmillan, Cham, 2018.

Eugen DIMANT and Christian DEUTSCHER, "The Economic of Doping in Sports. A Special Case of Corruption", in Paul Downward, Bend Frick, Brad R. Humphreys, Tim Pawlowski, Jane E. Ruseski and Brian P Soebbing (eds), *The SAGE Handbook of Sports Economics*, Sage, London, 2019.

Nicolas EBER, *Théorie des jeux*, Les topos, Dunod, Paris, 2018, 4ème édition.

Nicolas EBER, « Le dilemme du sportif », *Revue d'Economie Politique*, 118 (2), 2008.

Markus HARMS and Sebastian KAISER-JOVY, "The Impact of Manipulation on the Global Demand for Sport", in Markus Breuer and David Forrest (eds), *The Palgrave Handbook on the Economics of Manipulation in Sport*, Palgrave Macmillan, Cham, 2018, Cham.

Related articles: economics of crime, macroeconomics of international sporting success.

Economics of crime: the weaknesses of orthodox economic analysis of sporting abuses?

Sporting abuses

From the 1980s onwards, sport became global and gradually became the object of considerable financial stakes for a certain number of economic actors who could benefit from the development lever for their activity that the sporting spectacle represents. The media, marketing agencies and multinational sporting goods companies are particularly concerned. The fundamental question that arises from the arrival of new actors in the sporting sector is whether the financial logic will not pervert the sporting logic.

The first illustration of this kind of abuse concerns the role of television in modifying the rules of sporting competitions. Indeed, since broadcasting rights and sponsorship have become major sources of revenue for the professional sport sector, the television multinationals have been in a position of power to impose changes in the organisation of the sporting spectacle to adapt it to their financial self-interests. This is the case, for example, with the modification of the timetable of events according to the optimal television audience, which may result in sporting competition timetables that do not respect the biological rhythm of the athletes.

This domination of financial logic is expressed above all in the modification of sporting rules to make the sporting spectacle more televisual: tennis with the tie-break to shorten matches that had become too long for television or balls that have become yellow to be more visible on screen; judo with the abandonment of white for kimonos and the adoption of blue; rugby with half-time and its commercials; volleyball with the modification of the point count to shorten the duration of matches; table tennis with a shortening of the duration of sets and the magnification of the ball to be more visible.

Sports authorities have had to comply with the injunctions of television by adapting their competition formats. However, beyond these initial abuses, the financial stakes involved in the business of sport have attracted the interest of actors belonging to the world of organised crime into the sporting spectacle. It is possible to group all these abuses around three categories:

- ***Corruption: match-fixing, fixed-betting, mafias***

These are criminal manipulations that pose a mortal danger to the sporting spectacle. It is indeed the whole question of the confidence in the integrity of the competition, which, if it disappears under the influence of corruption, risks leading to a disaffection of the public, sponsors and patrons. The manipulation of sporting competitions is the new scourge that threatens the sustainability of professional sport on a global scale. Organised crime uses sport and sports betting as a means of diversifying its traditional activities (drug trafficking, prostitution, arms sales, racketeering, etc.). International criminal networks are all the more interested in sport because the profits are considerable and the risks far less than for traditional activities.

- ***Questionable financing: tax havens, money laundering, accounting manipulations, financial doping***

These fraudulent financial operations take the form of false bank guarantees, false invoices and remunerations to accounts in tax havens, slush funds, and artificially listed immaterial assets (players). Sophisticated financial and accounting techniques are used to conceal fraudulent operations: player transfers, retro-commissions, remuneration of players' agents, purchases of clubs, etc. Professional sport has thus become a very attractive sector for many dubious financial operations, including money laundering.

- ***Doping: individual doping, collective doping, state doping***

Here again, criminal networks have found a very lucrative and low-risk market in sports doping. Drug routes, controlled by organised crime, can overlap with those of doping, especially as there are common substances. Once again, international networks are involved, which will make it even more difficult to put policies in place to combat the problem.

Faced with all these abuses, most of which are underground, economic analysis is relatively helpless.

Methodological individualism

The economics of crime proposed by Gary S. Becker is based on neoclassical methodological individualism and is consistent with the ambitions of the Nobel economist to explain all human behaviour by means of a cost-benefit calculation. An individual will commit a crime if the utility he expects from it is greater than that which he would obtain by opting for other activities. This is the opportunity cost of the crime. Generally speaking, by comparing the amount of the penalty, relativised by the probability of being caught, and the amount of the expected gain, the individual will choose whether to engage in criminal activity or not. Such a calculation can equally be applied to the analysis of doping or the analysis of corruption as in the case of fixed-betting.

- ***Doping***

The doped athlete makes their decision after a rational calculation that takes into account: his or her expected gains, the cost of doping, the gains without doping, the risk of being convicted, the risk of having his or her reputation tarnished and the risk of having his or her life expectancy reduced. If the net gain is positive, the athlete who decides to dope is rational in the sense of economic theory. Nevertheless, such a conclusion may be rash, insofar as two obstacles may tarnish the theoretical calculation:

- Elements of athlete arbitration are very difficult to evaluate and integrate into a monetary calculation. How do you measure the damage to an individual's reputation? How do you measure the value of human life?
- Elements of the arbitration are missing, as the cost of doping is not solely a matter of individual calculation. Factors external to the individual sphere or even to the sporting sphere may influence the decision: pressure from the team or the managers, professional culture, pressure from public authorities (State Department), etc.

All this makes it clear that the economics of crime model will not be able to help to fight effectively the plague of doping. The microeconomic analysis of a rational *homo economicus* does not reflect the complexity of the determinants of the behaviour of a real individual.

- ***Corruption***

The same principle applies as for the analysis of doping: corruption is the result of a cost-benefit calculation that includes both monetary and non-monetary costs. If there is a net profit, a corrupt individual will be rational in investing in match-fixing or fixed-betting, for example. Nevertheless, the same shortcomings of microeconomic analysis are also present: non-monetisable features of corruption are not taken into account in the calculation, and many factors outside the individual sphere are ignored. In particular, corruption today requires sophisticated financial systems on an international scale to circulate the flows necessary to pay corrupt agents and all intermediaries. Such complexity cannot be addressed simply by a cost-benefit calculation. Economic rationality understood as the maximisation of expected utility does not reflect the reality of the behaviour of many economic actors. Methodological individualism is essential to the construction of the 'pure' neo-classical edifice, but it does not explain a reality that is primarily social and not individual. The best proof of this is the ineffectiveness of measures derived from the economics of crime to try to eradicate doping or corruption.

The ineffectiveness of control policies

- ***Doping***

If we follow crime theory, the fight against doping should consist in playing on the model's levers:

- Increase testing and the likelihood of the athlete being sanctioned
- Increasing the penalties for positive tests

One is entitled to ask why such measures, which have been implemented for many years, have not produced any significant effects. The reality shows that the perpetuation of doping is due to a vast chain of diverse complicities that call into question the supposed rationality of individual behaviour.

- ***Corruption***

Most of the proposals for instruments to combat the scourge of fixed-betting are based on the principles of criminal economics:

- Tightening of controls on the sports betting market
- Limitations on customer return rates

These measures have proved ineffective in the face of transnational criminal organisations, which require coordinated policies between states to better combat money laundering and tax havens.

The integrity of sport is in great danger and risks toppling the whole institution of sport. Economic research must go beyond the economics of crime, which does not allow us to address the problem of sporting abuses positively.

Further information:

Pascal BONIFACE, Sarah LACARRIÈRE et Pim VERSCHUUREN, *Paris sportifs et corruption. Comment préserver l'intégrité du sport*, Armand Colin, IRIS éditions, Paris, 2012.

Jean-François BOURG, *Le dopage*, Repères, La Découverte, Paris, 2019.

Clotilde CHAMPEYRACHE, *La face cachée de l'économie. Néolibéralisme et criminalités*, PUF, Paris, 2019.

Charles DUDOGNON, Bernard FOUCHER, Edmond HONORAT, Jean-Pierre KARAQUILLO et Alain LACABARATS (Dir.), *Intégrité des compétitions sportives*, Dalloz, Juris Editions, Paris, 2014.

Jean-Jacques GOUGUET (Dir.), *Le sport spectacle en danger ? Une approche économique,* Reflets et Perspectives de la Vie Economique, Tome LIV, n° 3, De Boeck, Bruxelles, 2015.

Related articles: doping, sporting exception, regulation.

Sporting exception: what are the specificities of sport?

Political instrumentalisation of sport

The expression ‘the sporting exception' refers to a preconceived idea that is still widely held in public opinion and relates to the neutrality of sport. However, history shows that from the very beginning professional sport has been used as a tool by political powers, with sporting victory appearing as proof of the superiority of the regime that had produced it. Sport has thus been put at the service of various ideologies throughout history.

At the end of the First World War, the first boycotts of international sporting events between the victors and the vanquished (France and Germany, for example) began. Between the wars, sporting competitions amongst representatives of dictatorships and democracies were used to assess which political regime was the most successful. The football World Cup in Fascist Italy (1934 and 1938) and the 1936 Berlin Olympics in Nazi Germany are examples of this use of sport.

In the post-war period, it was the Olympic Games, which, from Helsinki (1952) onwards, were plagued by medal counts considered to reflect the effectiveness of the political system behind them, which was completely contrary to the original spirit of the Games. This political instrumentalisation of sport is also expressed in the practice of campaigns calling for the boycott of mega-sporting events: the football World Cup in Argentina (1978), Russia (2010) and Qatar (2022); the Olympic Games in Moscow (1980) and Beijing (2008); and international competitions organised in South Africa until 1991 or in Saudi Arabia (Paris-Dakar 2020). The reasons given mainly concern respect for human rights.

Faced with this instrumentalisation, the sporting movement reacts most often by putting forward a sporting exception. This false neutrality of professional sport with respect to politics was coupled, from the 1980s onwards, with a strong dependence on new economic actors that risked undermining the reality of the sporting exception.

The domination of economics

The shift of sport to the economic sphere occurred in the 1980s, as shown by the example of Juan Antonio Samaranch, President of the IOC, who authorised the marketing of the Olympic rings in 1986. This shift meant the arrival of new financiers: sponsors, broadcasters, manufacturers of sporting goods and marketing agencies. The pressure of these new actors obeying a financial logic imposes itself on the sports sphere. The result is a weakening of the power of sporting authorities in the overall regulation of the system. Moreover, the economic nature of professional sport is changing profoundly under the influence of television. Two markets are concerned: that of broadcasting rights, which now constitute a major pillar in the financing of sporting events, and that of sport programmes, which attract the main sponsors. This raises two fundamental questions: what is the balance of power between all these stakeholders, and who holds the power? Is there not a risk that financial logic will prevail over sporting logic? To answer these questions, three types of analysis are necessary:

- An internal analysis of the sporting sphere to understand why sport is not an activity like any other and to determine its specificities.
- An external analysis of the sporting system to understand what types of pressures and constraints are being exerted on it. First of all, we need to know why these new actors are interested in sport. Then, we must understand that sport is a good vector for advertising and marketing. However, when actors invest massively in sport they want to see a return on their investment - hence the risk of abuses - such as changing the rules of the competition simply to adapt the sporting spectacle to an audiovisual product or using technological tools to avoid refereeing mistakes.
- The third analysis relates to the interactions between stakeholders belonging to the sporting sphere and those belonging to the economic and financial sphere. It is a question of knowing what balance can be achieved based on a double consensus. It is indeed accepted today that we can no longer play ' the sporting exception card', but it is also accepted that it is not desirable to abandon the sports sector to a single market and financial logic. Some specificities must be taken into account in the regulation of the system so that sport is not treated as an ordinary economic activity.

Sporting specificities

The example of the inclusion of sport in European competition law is representative of the recognition of the specificities of sport. It is Article 165 of the Treaty on the Functioning of the European Union (TFEU), which stipulates in particular: "The Union shall contribute to the promotion of the European dimension of sport while taking account of its specific characteristics, its structures based on voluntary activity and its social and educational function. [...] The Union's action shall be aimed at developing the European dimension of sport, by promoting fairness and openness in sporting competitions and cooperation between bodies responsible for sport, and by protecting the physical and moral integrity of sportsmen and sportswomen, in particular, the youngest amongst them ...".

Article 165 reflects a radical change in relations between the European Union and sporting institutions. For a very long time, there was a profound misunderstanding between the European authorities and the sporting world. Europe considered that professional sport was an economic activity in its own right and that competition law should apply. On the contrary, the world of sport considered that there was a real sporting exception. Article 165 does not go as far as such an exception but recognises that sport has a certain number of specificities that must be taken into account. This might have been enough at the time to avoid the excesses of the deregulation of the labour market, such as the Bosman ruling. It will certainly make it possible to guarantee legal certainty around financial fair play, which could be denounced in the name of competition law or business freedom. In the same vein, the Treaty recognises the need to take account of the specific organisation of sport around the voluntary sector, as well as the social functions it fulfils. The second part of Article 165 also defines the European vision of a sporting policy centred on the promotion of the specificities of the European model: defence of competitive balance and refusal of the American-style closure of professional leagues. In the end, Article 165 of the Treaty represents a compromise between total deregulation and sporting exception. We find again the theoretical analysis of the search for a balance between economic competition and sporting competition.

Further information:

Jean-François Bourg et Jean-Jacques Gouguet, *Economie politique du sport professionnel,* Vuibert, Paris, 2007.

Jean-François Bourg et Jean-Jacques Gouguet, *Economie du sport*, Repères, 3ème édition, La Découverte, Paris, 2012.

Related articles: Bosman ruling, volunteering, competitive balance, fair play, North American professional sports leagues, regulation, social utility.

Taxes: an effective instrument to fight against sport's market failures?

Definitions

Let us recall that an externality is defined as the impact of an agent's action on the well-being of others without this impact being taken into account by the market. If this impact is positive, we speak of a positive externality, if the impact is negative, of a negative externality. In the presence of such externalities, the market is no longer efficient and the equilibrium is no longer optimal. This is because externalities distort the optimisation calculations of rational agents since the market sends them price signals that are undervalued (positive externalities) or overvalued (negative externalities). This implies a misallocation of scarce resources and the market fails because it no longer plays its role of regulating the economy correctly. To put it another way, in the presence of externalities, there is a mismatch between social cost and private cost. If the externality is negative, the social cost is greater than the private cost and the market equilibrium results in a quantity traded that is greater than what would be optimal in the absence of externalities.

In general, to reach the optimum, private costs and benefits must coincide with social costs and benefits. The internalisation of external effects thus consists in leading economic agents to act as if the costs they impose on other agents or the benefits they receive from them were production costs or goods purchased on the market. Under these conditions, the market once again plays its regulatory role correctly, but beyond the principle, a mechanism for internalising external effects must be found. In economic theory, in the field of externalities relating to the environment, two solutions have been proposed: the one set out by Cecil Pigou in 1920, which gave rise to the polluter pays principle, and the one set out by Ronald Coase in 1960, which gave rise to the system of tradable permits.

The Pigouvian solution consists in making the person responsible pay a tax equal to the amount of damage caused. The essential problem lies, of course, in the determination of the optimal level of the tax that allows the equalisation of the social cost and the private cost. The amount of damage caused is not always easy to assess in monetary terms. In practice, such an amount is the subject of negotiations between stakeholders and the difficulty is often to arrive at a tax amount that is incentive-based, i.e., sufficient to induce a change in the behaviour of agents. In the case of a tax that is considered too heavy, the risk of a loss of competitiveness for businesses is denounced, especially in open economies if competitors do not do the same.

The Coasian solution consists in restoring property rights and setting up markets to exchange them. In the case of environmental pollution, if the producers hold the property rights, it is up to the victims to compensate them as a means to finance an anti-pollution process; if the victims are the owners, it is the producers who must compensate them. Moreover, Coase posed the hypothesis that there would be no transaction costs for this exchange of property rights to be effective.

Under perfect conditions, the Pigouvian solution (price regulation) or the Coasian solution (quantity regulation) lead to the same result in theory. From a practical point of view, however, economists have asked themselves which system is easier to implement. The hypothesis of the absence of transaction costs does not support the Coasian system, and in many fields, we have seen the introduction of taxes that have a double advantage: they make it possible to modify the behaviour of agents provided they are sufficiently incentivised (first dividend); they make it possible to collect resources that can be redistributed to improve the fight against the externalities denounced (second dividend). Sport has not escaped such a debate on the opportunity to introduce a certain number of taxes. We will take two examples of externalities with the sports labour market and player transfers, and with the sports entertainment market, which is undergoing numerous failures.

Failures in the professional sports labour market

A 'Coubertobin tax' on the transfer of young athletes was first outlined in principle, and then studied at great length, in its technical and financial aspects in the early 2000s. The aim is to curb the appropriation of talent from low-income countries by rich countries, free up new resources for the Third World to ensure real sporting development and reinforce the universal nature of competitions in accordance with the philosophy of Pierre de Coubertin, the innovator of the modern Olympic Games. This project of taxing sports transfers is in keeping with the idea of the American economist James Tobin, who in 1978 imagined a tax on international exchange transactions to discourage purely speculative movements and to allocate the revenue to development aid.

The growing number of transfers from the 1990s onwards to Europe (football) and North America (basketball, baseball) of young athletes under 18 years of age from Africa or Latin America raises moral, legal and economic problems caused by practices that are often illegal and clandestine. The continued liberalisation of the labour market and its unification have made it far easier for clubs in developed countries to access quality athletes cheaply. This massive recourse to talent from the Third World has increased to mitigate the consequences of rising wage costs for European or North American clubs.

This tax would cover all transfer fees and salaries stipulated in the first employment contract signed by athletes from developing countries with foreign clubs or agents. The host club and/or the agent would pay this tax, which could be collected by the national sport federations under the control of an ad hoc international organisation placed under the dual supervision of the UN and the IOC. The revenue from this tax would be used to finance, in the developing countries of origin, the construction of sports facilities, the creation of EPS programmes and the promotion of sport for all.

The feasibility and effectiveness of the Coubertobin tax are uncertain for several reasons. To be implemented and respected, all stakeholders must accept this tax: athletes, families, clubs, federations and agents. Otherwise, some operators would behave like free riders and continue to transfer athletes without paying the tax. To be effective, this tax must be generalised to all disciplines with a professional sector and applied worldwide. For its collection, as well as for its control, and the possible sanctions in case of fraud, the tax will entail control costs because there are risks of bargaining and corruption. The Coubertobin tax requires active cooperation between the sports movement, States and international organisations. This requires a common will to act and binding international legislation. Twenty years after its conception, the Coubertobin tax is still not in existence, even though it is regularly the subject of reflection, debate and proposals.

Failures in the sporting spectacle market

The sporting spectacle is subject to numerous cases of abuse: doping, financial doping, dirty money, tax havens, corruption, match-fixing, fixed betting, etc. All these abuses call into question the integrity of the sporting spectacle and constitute a danger to the sustainability of this sector of activity. Economists have therefore wondered whether the introduction of a certain number of taxes would allow for an effective fight against these plagues, under which the market is currently failing. For example, doping could be the subject of more applied economic thinking. Beyond the theory, we should try to determine in particular the amount of tax that would be a successful deterrent for the user of doping products.

Taxes already exist on commercial products linked to the sporting spectacle (television rights, sponsorship, sports betting). It would be necessary to better assess both their rate and their destination in order to rule on their potential efficiency (first dividend) and their social utility (second dividend). This work would also be interesting for analysing the conditions of implementation of these taxes in a highly competitive market at an international level. One of the difficulties encountered in the negotiations for their implementation is largely due to the heterogeneity of tax legislation at the European level. It is not possible to impose taxes in one country if all competitors are not subject to the same rules. Moreover, the denunciation of the heaviness of compulsory levies and the principle of fiscal neutrality limit the possibility of creating new sports taxes. Academic work is therefore needed to elaborate a global tax strategy that would allow the internalisation of the main diseconomies of sport. The imbalances are such today that the competitive balance of European championships is pure illusion. Moreover, it would be necessary to reflect on the use of the second dividend to support amateur grassroots sport, which constitutes the talent reserve of professional sport.

Further information:

Wladimir ANDREFF, *Why Tax International Athlete Migration? The "Coubertobin" Tax in a Context of Financial Crisis*, in J. MAGUIRE et M. FALCOUS (eds), *Handbook on Sport and Migration*, Routledge, n°44, 2010.

Wladimir ANDREFF, La taxe "Coubertobin". Ou comment réguler les transferts des très jeunes athlètes en provenance du Tiers-monde, dans *Apprendre à douter, questions de droit, questions sur le droit. Etudes offertes à Claude Lombois*, Pulim, Limoges, 2004.

Wladimir ANDREFF, « The Correlation between Economic Underdevelopment and Sport », *European Sport Management Quarterly*, 1(4), 2001.

Jean-François BOURG et Jean-Jacques GOUGUET, *Economie du sport,* Troisième édition, Repères, La Découverte, Paris, 2012.

Gregory MANKIW, *Les principes de l'économie*, Economica, Paris, 1998.

Related articles: sports agents, cost-benefit, economics of crime, competitive balance, evaluation, externalities, transfers, social utility, value.

Winner's curse: can we avoid the 'curse of the winner'?

The 'Winner's curse' arises mainly in four situations in sports economics: when candidates for the award of a mega-event overestimate its value to win at the expense of their competitors, which results in cost overruns; when North American cities try to attract a major league franchise from another territory by means of subsidies or tax exemptions, this relocation being generally irrelevant from an economic standpoint; when television channels try to acquire broadcasting rights for competitions by paying sums higher than their real value; when teams outbid each other to buy players at too high a price for their financial capabilities [Andreff, 2014]. We will analyse the first case, namely the winner's curse of the awarding of the Olympics. Three other similar 'cursed' situations are developed throughout the book (see in particular 'Sports arenas', 'Televised sport', 'Bosman ruling', 'Club deficits', 'Transfers').

The centralised award procedure for the Olympic Games: auctions and information asymmetry

The winner's curse reflects a recurring phenomenon in international sport with the overrun of the costs foreseen for the organisation of the Olympic Games (or any other mega-sporting event), mainly in terms of capital expenditure. The difference between ex-ante anticipated costs (before the IOC vote) and ex-post observed costs (at the end of the Games or later) is due to the bidding and auction process itself when there are several cities in the running to host the event. Each candidate city is obliged to bid for the event with a more ambitious project than its competitors (the auction principle) and accept to pay a higher cost than expected. The economic analysis of the IOC's method of awarding the Games shows that cost overruns are inevitable and that a deficit is likely.

The IOC is the owner of the Olympic Games, and as such, it defines the specifications of the competition imposed on the candidates: technical characteristics of the sports infrastructure (swimming pool, athletics stadium, dojo, skating rink, etc.) and non-sports infrastructure (airports, telecommunications systems, motorways, tramways, etc.). The IOC alone has the power to entrust its organisation. It aims to offer the best possible Olympic Games to its direct and indirect clients (media, sponsors, spectators, and television viewers), without worrying about the eventual oversizing of Olympic facilities concerning the needs of the local population. The latter will have to bear the long-term costs (investment, maintenance) without having the use of the said facilities, which are calibrated for high-level practice.

In a process in which the object of the auction has an uncertain value (no one knows the actual market value of a designation as a host city), the winner is the one who has overestimated the value of the object and thus won the tender (as the highest bidder) by outbidding all the other competitors. The winner of the auction loses financially, as his final bid exceeds the real value of the object won [Thaler, 1988].

Firstly, this situation corresponds to an anti-selection in information asymmetry, a cause of 'market failures' and inefficiency, since this phenomenon prevents the development of relationships between the IOC and the host city that are mutually beneficial. This is because the IOC almost systematically chooses the best project for itself, i.e., the most grandiose and therefore the most expensive. The IOC seldom chooses the cheapest project, as reducing the investment cost of the Olympic Games is not an objective for the IOC since it does not pay for them. For example, the file presented by Madrid received the fewest votes from IOC members for the 2020 Games with a "low cost, reasonable and responsible" project.

The IOC naturally has an interest in the bidding of the candidate cities against each other. And it is also in the interest of these same cities to outbid each other to increase their chances of winning. The chosen city is the one that offers the best project. The 'best deal' in terms of social benefits - generally overestimated - and financial costs - generally underestimated - [Andreff, 2012]. Anti-selection is in full effect: most expensive Olympic games, uncontrolled investment budgets and very high deficit risk. Other indications reflect the existence of the winner's curse: delays in the works programme thus generating price increases from contractors, financial extensions, lobbying and corruption.

Secondly, the appearance of the winner's curse in an auction can be explained by the opportunistic behaviour of candidate cities. On the one side, they know their project perfectly well and deliberately underestimate the cost of the infrastructure relative to the actual costs so as not to 'weaken' the project with prohibitive costs and gain acceptance from the population, the contractors and the voters. For the same reasons, they systematically overestimate the positive economic impact expected from the Olympic Games: in reality, the economic impact for the country of the host city is very low, and at worst, zero or even less. Candidate cities also hide negative externalities: the possible absence of taxpayers' willingness to pay contributions to the Games; the opportunity cost of the Games; the crowding-out effect with less frequentation by regular tourists fearing the saturation of the host city; gentrification; land speculation and an increase in property prices as well as increased pollution and traffic jams, etc.

On the opposite side, the IOC is not in a position to verify the reliability of the information provided. Exchanges between IOC officials and candidate cities or visits to the proposed Olympic venues are insufficient to reduce this information asymmetry. Moreover, the IOC members' vote is based more on their personal and political judgement of the bids than on their technical and financial aspects.

The winner's curse operates when the successful auction bid generates an abnormal or even negative return on investment, contrary to the theory of rational investment choice. The most significant examples of the negative consequences of the winner's curse of the auction are probably, and chronologically: Montreal (1976), Athens (2004), Beijing (2008), Sochi (2014) and Rio (2016)

The extent of the winner's curse should be assessed with an - ex-ante and then ex-post - economic cost-benefit analysis, using the same methodology. Further analysis should be carried out systematically and in addition to the cost-benefit analysis during the pre-bid study phase. The opportunity cost should be approached by calculating what other investments the host city could have made with the same amount of money spent on the Games, to verify whether alternative projects would not be more socially useful (i.e., with a higher net social benefit) for the well-being of the population (schools, hospitals, social centres, etc.).

Cost overruns as a sign of the winner's curse

However, in the absence of cost-benefit analysis and opportunity cost calculations for the Olympic Games, one indicator of the 'curse of the auction winner' is the underestimation of costs and its inevitable consequence of cost overruns. Cost overruns are systematic as soon as there are several bids (from 2 to 6 bids depending on the Olympiad, except in 1984, when there was only one). On average, for the summer and winter Olympics from 1960 to 2016, the ex-ante/ex-post cost overrun rate is 172% [Flyvbjerg, Budzier and Lunn, 2020]. A study of all the Summer Olympics from 1972 to 2012 and all winter Olympics from 1980 to 2014 showed that the winner's curse is the rule with one exception, the 1984 Summer Olympics in Los Angeles [Andreff, 2015].

For the Summer Olympics, the overrun rates range from 32% to 1130%: 32% for Atlanta in 1996, 93% for Sydney in 2000, 108% for Seoul in 1988, 109% for Athens in 2004, 127% for London in 2012, 156% for Barcelona in 1992, 171% for Munich in 1972, 247% for Rio in 2016, 385% for Montreal in 1976 and 1130% for Beijing in 2008 [Andreff, 2015; Andreff, 2012].

For the winter Olympics, the magnitude of the overruns is admittedly smaller, but remains very high, ranging from +17% to +495%: +17% for Vancouver in 2010, +29% for Salt Lake City in 2002, +56% for Nagano in 1998, +59% for Calgary in 1988, +82% for Turin in 2006, +135% for Albertville in 1992, +173% for Sarajevo in 1984, +201% for Grenoble in 1968, +277% for Lillehammer in 1988, +321% for Lake Placid in 1980 and +495% for Sochi in 2014 [Andreff, 2015; Flyvbjerg, Budzier and Lunn, 2020].

The only exception was the 1984 Olympic Games, which did not result in any investment cost overruns and therefore made a profit for the organising committee. Los Angeles, being the only candidate, did not have to overbid and underestimate its expenses to be chosen by the IOC due to the lack of interest from other cities after the financial disaster of the Montreal Olympics (1 billion dollars of deficit financed by the taxpayer from 1976 to 2006). In addition to the absence of competition, and therefore of bids and overbidding, it should be noted that Los Angeles had the necessary sporting and non-sporting infrastructure to host the Games even before its candidacy.

For the 2024 and 2028 Summer Olympics, several cities have withdrawn their bids - Hamburg, following a negative referendum, Boston, Budapest, Rome and Toronto following a decision by the public authorities – as a result, the IOC awarded the 2024 Olympics to Paris and the 2028 Olympics to Los Angeles. In fact, and a priori, the conditions for the emergence of a winner's curse have not been met. A first indication lends credence to this hypothesis: the ex-ante cost of the Paris 2024 Olympics is 6.8 billion euros (the cheapest since the Sydney Olympics in 2000), with a risk of over-costing identified by the General Inspectorate of Finance of 500 million euros, i.e., a virtual overrun rate of 7%. These figures seem rather reasonable, if they are confirmed ex-post, compared to the previous five editions of the Games: Tokyo (€13 billion, December 2020 figure not definitive taking into account the additional costs generated by the postponement of the Games to 2021 due to the COVID-19 pandemic.), Rio de Janeiro (€16 billion, 2016), London (€12 billion, 2012), Beijing (€32 billion, 2008) and Athens (€11 billion, 2004).

How to remove the winner's curse?

What solutions could eliminate the winner's curse or, at least, limit the additional costs [Andreff, 2015]? The first option would be to abandon the method of awarding the Olympic Games by auction with a competition between several candidate cities and drawing on the lessons of the Los Angeles Olympic Games in 1984. The event could always be organised in the same city (one for the Summer Olympics, another for the Winter Olympics). This would put an end to cost overruns and underestimates and would considerably reduce the necessary investments since there would no longer be any need to build the infrastructures imposed by the IOC in different cities for each Olympiad. Only the costs of maintenance, upkeep and modernisation of the sporting and non-sporting infrastructure would have to be borne. This is both a radical solution and a utopian one, as it would run counter to the commercial interests of all the sporting and economic actors who have much to gain from a change of location that would generate more turnover: the IOC and international federations, television channels, sponsors, marketing companies, equipment manufacturers, construction companies, tourism agencies, etc.

A very hypothetical alternative would be to let the IOC bear the entire cost of the Games. There would be no more winner's curse and no more socialised long-term costs. The IOC would continue to choose the venue and the budget of the Games would be calibrated to the level of its revenues (5-6 billion euros net on average per Olympiad). However, it is difficult to imagine that the IOC would agree of its own accord to give up the economic advantages of its monopoly on the supply chain of the Games.

Another solution would be for the IOC to announce that it would choose the project that, while respecting the specifications of the Games, would be the least expensive. This hypothesis seems unlikely, as it too would run counter to the IOC's desire to have the most beautiful Games possible every four years. This initiative would also be counterproductive, as it would encourage the candidate cities to underestimate the costs even more. This again would amplify the effects of the winner's curse of the auction. Instead, the introduction of a ceiling on expenditure, that cannot be exceeded, to curb the growing gigantism of the event would deprive the IOC of an economic criterion for selecting the host city.

More realistically, a compromise could change the rules for competitive bidding and the eligibility of candidates. Thus, the consequences of the winner's curse would be limited by a double restriction. A rotation by sufficiently narrow geographical zones (a dozen in the world) would considerably reduce the number of cities able to host the Games. A ban on bidding more than once in a century would also limit the effects of bidding. The IOC could thus frequently find itself with only one candidate city, a necessary configuration for the disappearance of the winner's curse [Andreff, 2013].

In 2019, the IOC, concerned about the scarcity of bids, adopted two reforms to the selection procedure, as part of its Agenda 2020, intending to try to reduce the cost of the bidding process and the organisation of the Games. A combined bid will be able to be carried by several cities, regions or countries (until now only one city was entitled to apply). A referendum will have to be held systematically in the candidate cities if the national legislation allows it. These measures will likely be insufficient to reduce the winner's curse.

Despite a tendency to systematically overrun costs, with chronic overspending of sporting infrastructures, recurrent social deficit, overestimation of economic by-products and more than questionable opportunity costs, the obvious question begs to be asked: Why do cities continue to bid to host the Olympic Games (or other mega-events)? According to the results of a study of five editions of the Olympic Games plus three football World Cups, the answer is not economic, but rather political (patriotism, belonging to the same community, electoralism), geopolitical (soft power), and psychological (sense of pride, happiness of the population) [Mitchell and Fergusson Stewart, 2015].

Further information:

Wladimir Andreff, « Les dépassements de coût des Jeux Olympiques : Paris doit-elle candidater à n'importe quel prix ? », *Quel Sport ?*, juin 2015.

Wladimir Andreff, "The Winner's Curse in Sports Economics", in Oliver Budzinski and Anne Feddersen (eds), *Contemporary Research in Sports Economics*, Peter Lang Academic Research, Frankfurt am Main Editors, 2014.

Wladimir Andreff, « Pourquoi les Jeux de Sotchi seront plus coûteux que prévu », *Revue internationale et stratégique*, vol 4, n°93, 2013.

Wladimir Andreff, "The Winner's Curse: Why Is the Cost of Mega Sporting Events so after Underestimated?" in Wolfgang Maennig and Andrew Zimbalist (eds), *International Handbook on the Economics of Mega Sporting Events*, Edward Elgar, 2012.

Bent Flybvjerg, Alexander Budzier, and Daniel Lunn, "Regression to the Tail: Why the Olympics Blow Up 1960-2016", *Environment and Planning A: Economy and Space*, September 15, 2020.

Heather Mitchell and Mark Fergusson Stewart, "What should you pay to host a party? An economic analysis of hosting sports mega-events", *Applied Economics*, Taylor Francis Journals, vol.47, n°15, March 2015.

Richard H. Thaler. "The Winner's Curse", *Journal of Economic Perspectives,* 2(1), 1988.

Related articles: opportunity cost, cost-benefit, sporting venues, evaluation, externalities, legacy, economic impact, soft power, social utility, value.

INDEX OF ACRONYMS

ATP	Association of Tennis Professionals
BATX	Baidu, Alibaba, Tencent, Xiaomi
CAS	Court of Arbitration for Sport
CDES	Centre de Droit et d'Economie du Sport (*Centre for Law and the Economy of Sport*)
CIES	Le Centre International d'Etude du Sport (*Centre for the International Study of Sport*)
CNOSF	Le Comité national olympique et sportif français (*French National Olympic and Sports Committee*)
ECJ	European Court of Justice
EPO	Erythropoietin
EPS	Education Physique et Sportive (Sporting and Physical Education)
FIFA	Fédération Internationale de Football Association (*Federation of international football associations*)
ICU	International Cyclist Union
IOC	International Olympic Committee
IPO	Initial public offering
GAFAM	Google, Apple, Facebook, Amazon, Microsoft
GDP	Gross Domestic Product
GPG	Global Public Good
MLB	Major League Baseball
MLS	Major League Soccer
NBA	National Basketball Association
NFL	National Football League
NGO	Non-governmental Organisation
NHL	National Hockey League
OG	Olympic Games
OMIJ	Observatoire des Mutations Institutionnelles et Juridique, University of Limoges (Observatory of Institutional and Legal Changes)
PGA	Professional Golfers' Association
SASP	Société anonyme sportive professionnelle (Professional Sport Limited Company)
TFUE	Treaty on the Functioning of the European Union
TPI	Third-party investment
TPO	Third-party ownership
UEFA	Union of European Football Associations
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization Science and Culture
WADA	World Anti-Doping Agency

TABLE OF CONTENTS