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# THE PALGRAVE HANDBOOK ON THE ECONOMICS OF MANIPULATION IN SPORT

Edited by  
Markus Breuer and David Forrest



# The Palgrave Handbook on the Economics of Manipulation in Sport

Markus Breuer · David Forrest  
Editors

# The Palgrave Handbook on the Economics of Manipulation in Sport

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# 1

## Introduction

Markus Breuer and David Forrest

Professional sport seems to adopt an ever higher profile. News stories commonly refer to dizzying sums of money or to extraordinary reach in terms of audience numbers. For example, the British and Russian governments were evidently willing to spend nearly USD15b and USD22b, respectively, on hosting the Summer (2012) and Winter (2014) Olympic Games in London and Sochi (Flyvbjerg et al. [2016](#)). The foreign owners of the Paris Saint-Germain football club proved willing to pay more than EUR200m to FC Barcelona to transfer the registration of a single player, the celebrated Neymar, in 2017. Clubs in America's National Football League pay an *average* quarterback a salary of USD4m per season (Kahn [2017](#)) and the television networks which broadcast its annual Super Bowl match attract a (domestic) television audience of many more than 100m, charging USD5m for an advertising slot (Dorfman [2017](#)). The Super Bowl is also reputed to generate (domestic) betting stakes of nearly USD5b though the sport cannot easily capture a share of this particular revenue because the wagers are placed in illegal markets (American Gaming Association [2017](#)).

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Developments in technology over several decades have enabled professional and elite sport to reach this position where it can attract such large sums of money and where its major events can be viewed by so many. The two go together of course. Modern media make it possible to sell the product to huge numbers of consumers rather than just to those who can fit into a stadium and it is their money, which reaches sport primarily via the sale of media rights, which makes the dizzying expenditures possible.

As unprecedentedly large amounts of money pass through sport, it is not surprising that predators seek to take advantage by manipulating the institutions of sport for their own gain. The well-publicised financial exploitation of football's World governing body, FIFA, by its own officers is an example of how, without adequate supervision, individuals will look to capture economic rents accruing to monopoly suppliers of sports competitions. Size of audience is an independent source of another species of manipulation since the global reach of sport attracts governments to intervene to use sport for their own political ends. The Russian Government stands accused of manipulating events on the field through state-sponsored doping programmes, presumably because it judged that international sporting success would play well with both its domestic population and countries where it wanted to promote a favourable image. Its exposure has had major repercussions with the banning of most of its athletes from Olympic and Para-Olympic Games and international track and field championships. And it may not be just within elite sport itself that there are repercussions. The tarnishing of the reputation of a sport may produce negative externalities in recreational sport. For example, parents may deter their children from taking up activities associated with doping.

These opening remarks refer to some of the different types of manipulation that challenge sport today. This volume takes a broad canvass. It deals with attempts to manipulate sports events on the field, for example by doping to increase athletic performance (cheating to win) or by fixing, paying athletes to underperform (cheating to lose). It deals also with attempts to subvert the institutions of sport through financial corruption. Authors of manipulation can be sports insiders (players, referees and judges, coaches, owners, officials of governing bodies) or external (e.g. professional bettors, organised crime, governments). Many forms of manipulation violate sports rules and sometimes civil or criminal law. Other forms of manipulation can be said to violate only accepted norms of behaviour. In the latter case, it can be ambiguous whether particular actions should in fact be regarded as

‘manipulation’, a word which suggests behaviour which should be considered negatively. For example, if two football teams agree to manufacture a drawn match to allow both to progress to the next stage of a tournament (as was alleged of Peru and Columbia in the qualifiers for the 2018 World Cup), should it be regarded as playing by the rules of the competition or as cheating likely to undermine public trust in the sport? If a wealthy investor funds a club from his own resources to allow it to gain success which would otherwise be impossible given the market-generated revenue of the club, should this be prohibited because it allows external agents to change the power structure of the teams and the competitive balance of the league? Or is it to be regarded as legitimate because it allows new teams to feature in sporting honours? These issues, considered through the lens of economics, are among those within the scope of this Handbook.

The book is divided into five sections. The first section introduces the topic, discusses definitions of manipulation and puts everything within the context of changes in the broad market for sport. Section two deals with specific types of manipulation in professional sport. The third section focuses on how the law deals with manipulation. Section four discusses manipulation at the level of sports organisations. Finally, Section five offers some reflections, based on contributions from our various authors, on how the diverse forms of manipulation prevalent in contemporary sport should be addressed and the role of economic thinking in framing appropriate policy.

## Chapter 2

Prof. Wladimir Andreff, long one of the leading scholars in sports economics, presents in this first substantive chapter of the Handbook a comprehensive overview of the history and current state of manipulation of sport. He defines various types of manipulation and then hones in on doping and on match-fixing, the two forms of manipulation which most directly affect events on the field in particular contests. On each, he proposes a novel policy to mitigate manipulation, in each case based on modifying incentives on whether to cheat. These suggestions illustrate a theme of the volume, that economic thinking has much to contribute in understanding and addressing attempts to manipulate sporting competition.

## Chapter 3

In the limit, consumer views matter. On the one hand, if revenue suffers when manipulation is revealed, this may provide some check on corrupt behaviour by, or tolerated by, sports governing bodies. On the other hand, negative fan reaction could become an existentialist threat to some sports competitions. In Chapter 3, Prof. Sebastian Kaiser-Jovy and Marcus Harms provide an overview of the current state of research on the impact of manipulation on the demand for sport. Their focus is on doping, match-fixing and corruption in sport organisations. Using an integrative review, the authors are able to identify six studies and one model. Whilst there is plentiful research in the field of manipulation in sports as well as on the subject of demand for sports, empirical studies of the impact of manipulation on demand are relatively rare. Whilst the number of studies is limited, it appears to be true that interest in a sport declines where manipulation is revealed. However, consumer behaviour seems to exhibit little change in response to doping scandals. More research is clearly needed to gain fuller understanding of the effects of manipulation on sport demand. They would point out in particular that it is not yet established whether fans really care about doping. If not, the case for strong anti-doping programmes rests more strongly on protection of athlete health and welfare.

## Chapter 4

In Chapter 4, Prof. Terri Byers takes a very broad view of ‘manipulation’. Sport may be manipulated by governments and commercial interests for their own ends as well as by athletes who cheat and administrators who line their own pockets. The process of professionalisation of sport and the emphasis on profit may itself have changed the behaviour and attitudes of professional athletes. Moreover, there are likely to be effects running from elite sport to the recreational and voluntary sectors where there is a general decline in participation and volunteering. Indeed in Chapter 6, attention is drawn to the extremely large falls in participation in football in China following revelations in the 1990s that the professional league was deeply corrupt. But, as Prof. Byers notes, the situation in sport falls into the category of ‘wicked problems’ where complexity of relationships makes it hard to distinguish causal connections between different components of the whole. In any case, any links between manipulation in professional sport and ongoing problems in the recreational sector deserve further exploration in future research. The emphasis in the rest of this volume is on professional sport.

## Chapter 5

Prof. Frank Daumann proposes an economic explanation for doping, focusing on the costs and benefits to individual athletes of using performance-enhancing substances in high-performance sports. Using a game-theoretic approach, he shows that athletes currently have strong incentives to violate rules and that these incentives are strongest in sports where performance is precisely measurable and in which historical tables of best performances play an important role. Considering the case for a legal ban on doping, he concludes that it is hard to justify such legislation (with the exception of athletes under age). Rather organisers should employ anti-doping measures which either reduce the benefits associated with the choice to dope or increase the cost. Prof. Daumann also proposes an innovation to policy termed the ‘innovation bonus’ which would be a response to the current tendency for athletes and their coaches to search for novel substances not yet on the list of excluded substances.

## Chapter 6

Prof. David Forrest outlines various reasons why the results of sports matches might be contrived by match fixers; but most of his chapter relates to the evident and ongoing epidemic of betting-related manipulation, which corrupts many sports, including particularly football, cricket and tennis. His framework is that there is a market for fixes in which supply is by sports insiders (players, referees) and demand typically originates with syndicates aiming to profit from trades on betting market. The step increase in activity in the market for fixes is attributed to the greater profits that fixers can now make given huge increases in the liquidity of sports betting markets as the online product has evolved. This high liquidity is concentrated in effectively unregulated markets, primarily in Asia. Prof. Forrest argues that it is beyond the power of sport to bring reform to these betting markets and its policies therefore necessarily have to focus on the supply side of the market for fixes. Sports players are likely to become less willing to supply fixes only in a sports industry in which player rights are better respected. There is also scope in individual sports for change in prize structures to modify incentives to supply fixes. As with doping, fast progress in addressing ills requires better governance in sport across the board.

## Chapter 7

Prof. Markus Breuer's focus is on multi-club ownership situations, i.e. situations in which a single company (or an individual) holds shares in at least two clubs competing in the same competition. Under this scenario, there is a risk that the shareholder might use his position and power to influence the outcome of matches and thus compromise the integrity of the competition. The growing importance of investors into sport, especially in professional football, is making this scenario more common and its attendant risks more common. Although there is, to date, hardly any empirical evidence of manipulation in multi-club ownership situations, UEFA and other sport organisations have already introduced special rules and regulations. Using a formal analysis, Prof. Breuer shows that fans and their behaviour could play a crucial role: if they have a strong preference for honest contests and are willing to sanction any intervention (e.g. by reducing their willingness to pay for tickets), it might be the investor's profit-maximising strategy not to intervene at all. Thus, market regulations might not be necessary to maintain integrity.

## Chapter 8

From contrasting perspectives, Chapters 8 and 9 each address situations where individuals or state or private entities inject money into a club to allow it to perform at a level above that which would be possible with the resources it could capture from its own activities, given its market size and sporting record. In Chapter 8, Dr. Mathias Schubert and Sean Hamil argue the case that external injections of cash should be regarded as 'financial doping'. They argue that, similar to physiological doping, financial doping is also a form of manipulation which undermines the core values of sport. In general, it could be said that the more successful a club is on the field, the better are its opportunities to generate revenue. Financial doping disrupts this idea because funding is often provided independently from sporting success. UEFA, as the agency responsible for the most important competitions in European football, has sought to address the implications of financial doping through its Financial Fair Play rules. Given the experience of clubs which were able to overindulge in systemic loss making but subsequently experienced financial distress or even collapse, the Financial Fair Play rules seek to stop the problem at source by requiring clubs to live within their means as implied by the revenue they can generate themselves.

## Chapter 9

Prof. Oliver Buzinski's chapter also deals with external injections of money into clubs and UEFA's intervention through the Financial Fair Play regulations. In contrast to Schubert and Hamil, he is very sceptical over whether the new layer of regulation is for the good of the sport. He argues that every regulative financial intervention distorts sporting competition to some extent and creates beneficiaries and losers. Often the results do not coincide with the stated goals of the intervention. This can be due to unintended consequences and side effects of regulation—a scenario well known in economic analysis. It can also be a consequence of the vested interest of powerful regulatory bodies and/or participants (clubs) that are sufficiently powerful to influence the market-internal regulator (lobbyism). Again, the politico-economic deficiencies of real-world regulations are another well-known topic in economics. Real-world financial regulation, thus, may distort sporting competition by protecting the competitive advantages of powerful clubs, cementing the competitive order, deterring market entry by new club talent, serving the regulatory interests of sports associations and/or their officials and in other ways as well.

## Chapter 10

Whereas the role of big data for sports marketing has been discussed in detail in academia, Prof. Ian McHale throws another light on other potential uses of statistical analysis. Hitherto, the use of statistics in betting markets has mainly been twofold: bookmakers use models for forecasting the results of sporting events, whilst sophisticated professional bettors use similar models to exploit inefficiencies in the betting market. Recently, a third use of statistics has emerged in the analysis of betting markets to identify potentially manipulated matches. Prof. McHale shows how a well-calibrated probabilistic forecasting model for match outcomes can serve as a benchmark against which to evaluate the evolution of actually observed odds. Substantial deviation of the evolution of observed odds from what the model would indicate as 'rational' flags a reason for the match to be looked at more closely. Prof. McHale illustrates how this approach works in practice at the market-leading monitoring agency, Sportradar. Several cases of manipulation detected by Sportradar have resulted in criminal or sporting sanctions; and evidence from its Fraud Detection System has, as discussed by Prof. Ian Blackshaw



elsewhere in this volume, been validated by the Court of Arbitration for Sport as legitimate evidence in cases involving alleged fixing. It is clear that monitoring betting markets based on underlying statistical methodology is becoming a required component of any sport's integrity policy.

## Chapter 11

Investigation and prosecution of manipulation are not always just the concern of sports governing bodies. Increasingly corruption in sport attracts the attention of law enforcement and the criminal law. Against this background, Kevin Carpenter, lawyer and currently special counsel on sports integrity at Genius Sports, summarises key legal issues in this field. First, the WADA Code including issues like burden and standard of proof and sanctions in case of proven doping is discussed. Moreover, he sheds light on the Spanish anti-doping laws. Due to the scandal named after Eufemiano Fuentes, the country can be seen as a perfect example how countries might deal with doping through criminal law. Second, the chapter also covers issues related to match-fixing, paying special attention to complications associated with the international nature of the betting markets where gains from fixing are realised. Carpenter uses his professional background to distinguish especially between criminal law and sports law. Additionally, he refers to data protection issues which are important if personal data are used for detecting fraud. The chapter ends by analysing the question of what good governance would look like and what information needs to be made public to combat corruption.

## Chapter 12

Where sports use their own disciplinary structures to sanction and therefore deter manipulation, parties have the freedom to appeal to an external tribunal, the Court of Arbitration for Sport (CAS). During its more than thirty years of operation, CAS has developed into being, as its founders intended, something akin to a 'Supreme Court of World Sport', dealing with an ever increasing and wide range of sports-related cases. In this chapter, Prof. Ian Blackshaw not only discusses the structure of the Court but also draws attention to, for example, the cost of CAS proceedings and legal challenges to CAS awards. Focusing on two match-fixing cases from football, 'Metalist' and 'Skenderbeu' Prof. Blackshaw

draws out some general principles established at CAS. In both cases, the CAS confirmed the principle of strict liability and also vicarious responsibility in match-fixing cases. In other words, football clubs can be held liable without fault for the actions of their players and officials. Moreover, in the Skenderbeu decision, the evidence offered to CAS relied mainly on monitoring systems for betting markets (as discussed in Chapter 10 of this Handbook). The Court's decision in the Skenderbeu case validated the role played by the monitoring system used by UEFA and operated by Sportradar. Willingness of CAS to accept evidence from monitoring as part of the case appears to have persuaded a new range of sports that monitoring betting markets to deter and detect manipulation should be a central part of their anti-corruption infrastructure.

## Chapter 13

Prof. Wolfgang Maennig, who, in addition to being an internationally acknowledged expert on corruption in sport, is himself an Olympian and gold medallist, discusses the principles of good governance in sport organisations. Although there is no universally employed definition of good governance, it is generally understood to imply the necessity to define clear roles, principles and responsibilities for sports bodies, as well as to adopt an enforceable code of ethics. Prof. Maennig sees transparency as the basis of each concept of democratic governance. Against this background, he describes the principle of transparency and its interaction with autonomy, accountability and integrity. Since governance structures in sport need to reflect the ethical values of sport in general, attempts at applying already existing checklists for corporate governance structures failed in the past. Corruption can be considered as the main threat to good governance in sport organisations. Prof. Maennig uses an economic approach to investigate how much effort should be used for the fight against corruption and ends by illustrating the importance of good governance in relation to mega-sport events.

## Chapter 14

Following a general discussion of governance, mega-sport events and the threats resulting from corruption, Prof. Bruce Bean deals in this chapter with the particular case of FIFA. He notes that FIFA's corruption has a long history, since the presidency of Joao Havelange in the mid-1970s. Under

Havelange, FIFA became global and wealthy, which increased incentives for corruption at different levels. After focusing on the FIFA World Cups of 2006, 2010 and 2014, Prof. Bean discusses the reports of the Independent Governance Committee and the Garcia Investigation as well as FIFA's reaction to the reports. Independent publications show the urgent need for reform and provide recommendations on how to implement better corporate governance at FIFA. However, Prof. Bean has little faith in FIFA's ability to cure itself and has doubts about the influence of sponsors and purchasers on the organisation. Instead, he focuses on the role of the Swiss government and the potential for the framework of Swiss law to be used put pressure on FIFA in terms of required standards of governance. But there are also strong doubts on the Swiss government's willingness to impose true accountability upon FIFA. This discussion is relevant to many other sports than football because the majority of sports international governing bodies have chosen to locate themselves in Switzerland and therefore under Swiss law.

## Chapter 15

Prof. Victor Matheson, Dr. Daniel Schwab and Patrick Koval deal with corruption in the bidding, construction and organisation of mega-events, mainly the Olympic Games and the FIFA World Cup. Hosting a mega-event brings a variety of perceived benefits to a country. Boosters of such events promise that they will prove to be an economic windfall, especially in the tourism and construction industries. In the processes required to host a global mega-event, corruption has been prevalent on numerous occasions, leading to unnecessary costs becoming the ultimate responsibility of a host government's taxpayers. The authors examine the history of corruption in sports mega-events to identify parts of the bidding and preparation processes that are vulnerable to illicit behaviour and propose potential solutions to be implemented in order to prevent further corruption. Ideas discussed cover e.g. sanctions (for applicant countries/cities), an increase of time between the selection of a host country and the execution of the event, and the radical approach to choose a single location where mega-events are hosted.

## Chapter 16

This is where the editors reflect on the principal themes running through the volume and how they may point towards answers to the question raised by more than one of the individual contributions: 'what is to be done?'.

Their thinking, based on the collection of essays in the Handbook, is that all species of manipulation of sport have potential for mitigation if there is reform in the direction of better governance *and* if due attention is paid to the role of incentives in shaping individuals' decisions on whether or not to engage in corruption.

## References

- American Gaming Association. (2017, January 31). Americans to Bet 4.7 Billion on Super Bowl 51. *Press Release*. Available at <https://www.americangaming.org/newsroom/press-releases/americans-bet-47-billion-super-bowl-51>. Last access October 26, 2017.
- Dorfman, J. (2017). *Super Bowl Ads Are a Bargain at \$5 Million* (Published February 4, 2017). Available at <https://www.forbes.com/sites/jeffreydorfman/2017/02/04/super-bowl-ads-are-a-bargain-at-5-million/#4a39d8592bce>. Last access October 26, 2017.
- Flyvbjerg, B., Stewart, A., & Budzier, A. (2016). *The Oxford Olympics Study 2016: Cost and Cost Overrun at the Games*. Saïd Business School Working Papers.
- Kahn, S. (2017). *Average NFL Player Salary—2017 Update* (Published March 3, 2017). Available at <http://gazettereview.com/2017/03/average-nfl-player-salary/>. Last access October 26, 2017.



# 2

## Different Types of Manipulation in Sport

Wladimir Andreff

### Introduction

Increased money inflow into sports and its globalisation have triggered a number of dysfunctions, manipulations and corrupt practices over the last four decades or so, creating a so-called dark side of sport<sup>1</sup> and its industry. Nowadays, such behaviours spread over an increasing set of sport disciplines worldwide; first, they simply breach sport rules; then they infringe the sport ethics and jeopardise sport integrity.

To delineate clearly what is meant by sport manipulation, corruption in sport is understood as any illegal, immoral or unethical activity that attempts at deliberately distorting the outcome of a sport contest for the personal material gain of one or more parties involved in that activity (Gorse and Chadwick 2013). Various sport manipulations encompass corruption, but not all of them. Technological manipulations such as riding a motorised bike in the Tour de France do not have any corrupt dimension. Therefore, sport manipulation covers a wider scope than corruption, while it

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<sup>1</sup>On the dark side of sport, see the special issue of *European Sport Management Quarterly*, 9(4), 2009.

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is less extensive than sport dysfunctions which point at all actual facts denoting that sport is not functioning as it should or not according to accepted explicit or implicit rules. For instance, under sport dysfunctions are listed salary, racial, linguistic and gender discrimination (Andreff 2011), forbidden international transfers of teenage football players,<sup>2</sup> weak governance of sport clubs and sports governing bodies; per se none of these involves either sport manipulation or corruption; none threatens sport in terms of its very existence, ethics and integrity. Sabotage—such as goading to provoke illegal responses from competitors on the pitch or attempting to persuade the referee that opponents have engaged in illegal acts (Preston and Szymanski 2003)—is on the borderline between dysfunctions and manipulations; it will not be covered either even though it dampens the fans' enthusiasm.

Sport manipulation is a modern way of cheating sport rules and/or the common law in the era of the Internet, economic globalisation, flourishing tax havens and offshore shadow banking, asset grabbing, fake accounting and spreading financial greed-led strategies (Andreff 2013). Thus, it is not confined to either cheating or sport corruption though, just like corruption, it requires opacity. Sport manipulation encompasses various means of getting benefits from a sport contest distorted on purpose for winning (doping and technology) or losing (match-fixing and fraudulent betting) against the sport rules, or for attaining non-sporting outcomes (embezzlement, tax evasion and money laundering) by means of sport distortions. Repeatedly breaching the sport rules, manipulation destroys sport ethics, ruins sport integrity, undermines spectator and sponsor interests and, eventually, may shrink the market of the sports industry in the long run.

The Council of Europe Convention on the Manipulation of Sports Competitions (CECMSC) adopted in 2014, with a focus on conflict of interest involving sports betting operators and sports organisations, fraudulent and illegal sport bets and corruption, has defined manipulation of sports competitions as: “an intentional arrangement act or omission aimed at an improper alteration of the result or the course of a sports competition in order to remove all or part of the unpredictable nature of the aforementioned sports competition with a view to obtaining an undue advantage for oneself or for others”. This definition is now the guideline for Interpol's inquiries and chasing criminals (Interpol and IOC 2016).

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<sup>2</sup>Though these transfers involve a dimension of human trafficking, they are not directly distorting sporting outcomes on purpose and have not attracted criminals into sport—only unscrupulous and unregistered players' agents—so far (Andreff 2010); they will not be covered here as a sport manipulation.

This chapter ranks manipulations according to their increasing threats for sport. Starting with “minor” sport manipulations which are at odds with sporting ethics but do not endanger the very existence of sport. Then, it turns to those sport manipulations which are associated with—or require the participation of—corrupts and corruptors. Finally, it deals with two major types of manipulation, doping and online betting-related match-fixing, that put sport at risk since they are likely to cut it from its ethical roots, compromise its integrity in the long term, and urgently need action from sports governing bodies and/or governments. Some policy considerations are reviewed in regards to these last two types of manipulation.

## **“Minor” Manipulations in Sport**

The most simple and common manipulation in sport—as ancient as the first sport contests dating back to centuries B.C.—consists in cheating to win a sport contest by infringing the rules of a given sport with a view to obtaining the monetary or non-monetary reward offered to the winner. Normally such behaviour is detected by referees and umpires on the pitch and punished accordingly. Since cheating tactics have become increasingly sophisticated these days, some technological innovations can help detection such as cameras, video replays or phonic communication between the referees, and can be used in the latter’s decision-making (punishment or not). Or simply the number of referees can be increased as has happened, from one to five, in soccer over the years; similarly, since 1998–1999, the NHL has experimented with two instead of one on-ice referee.

Often violations of sport rules committed by athletes and the penalties assessed for those violations are analysed in terms of costs and benefits (Allen 2002) in line with the economic model of crime. However, guilty players are not criminals in the eyes of the law. Moreover, sport contests have survived such cheating for two millennia; of course, the latter must always be under the spotlight of detection and refrained by punishment, but there is no way in which ongoing cheating will kill sport competition and ethics. Cheating is often part of the game ... and fun. Combating cheating in sport contests relies on technologically innovating to detect it, adapting sport rules, sanctions and incentives to win through a more appropriate reward (prize) scheme and a better-designed tournament structure.

Technological manipulation is common practice since sport contests are used as testing grounds for technical innovations (Andreff 1985). Doping is a case in point. However, Ken Read, the 1979 Avoriaz-Morzine

downhill-race winner was eventually disqualified because he was wearing an innovative though outlawed “fastest” ski-suit. Winning Brabham and Williams cars were excluded from the 1982 Brazilian F1 Grand Prix ranking for having cheated on the cars’ weight by adding water tanks which were poured out on the circuit immediately after the starter signal. The most recent issue in this respect is the utilisation of micro-engines integrated into riders’ bikes. Suspicions had emerged with Fabian Cancellara’s wins in the Tour des Flandres and Paris-Roubaix in 2010. Since then the Union Cycliste Internationale has developed a new technique of magnetic scanner detection. Femke Van den Driessche, the 2016 winner of the women’s cyclo-cross world championship, was detected as having ridden a motorised bike and disqualified. In the 2015 Tour de France, motorised bikes seemed to have been used during some mountain stages; so, in 2016, with the help of the French Commissariat for Atomic Energy, distant infrared cameras were placed at some strategic points of mountain stages.

Technological fraud is obviously a manipulation that breaches the sport’s rules and must be sanctioned as such, and further combated with the same tools as for cheating even though riding a motorised bike per se is not a crime under common law and is used by many people outside cycling contests.

Another category of sport manipulations not only breaches the rule of fair play and sporting values but also infringes the law as regard business accounting, commercial and financial transactions. As long as such practices are more the exception than the rule in sport and those accountable for them are cracked down on by the police and sued in court, they can be ranked as minor (or marginal) sport manipulations that do not prejudice the foundations of sport. Unfortunately, they grow in number. Means of embezzlement in sport are false invoices, fake ticketing, fake accounting, fictional purchases of players, hidden honoraria and intermediate payments regarding transfers with unregistered players’ agents, creating offshore fiduciary companies and transfer of funds to tax havens (Pons 2006). Some clubs have been convicted of fake accounting, fake invoicing and holding secret funds, and their chairmen have been sentenced for abusing social benefits in French football (chairmen of AS Saint-Etienne, Girondins de Bordeaux, RC Toulon, Olympique de Marseille and Paris-Saint-Germain, Andreff 2000). In 2004, 51 Italian football clubs were suspected of fake accounting; in 2005, a dozen were relegated to a lower division for not paying taxes, and two were sequestered due to their tight relationships with the Camorra (Andreff 2006). Players’ transfers (some of them fictitious) and secret



transfers of funds are sometimes used to move money in an opaque way from one club to another or to star players' accounts domiciled in tax havens or tax-friendly countries, such as Luxembourg and Switzerland (as in the case of Paris-Saint-Germain's fictitious contracts with Nike and some players from 1998 to 2005).

More recently, 64 club managers in Italian football's *Serie A* and *Serie B* were sued in the Naples court in January 2016 for fake accounting and tax evasion while in November 2015 Zdravko Mamic, Dinamo Zagreb's boss had been sentenced to jail for embezzlement and tax evasion. In 2016, the investment fund Doyen Sports was suspected to have used third-party ownership for transferring €11 million of fees to tax havens. Since the Lux-leaks and Panama-Papers disclosures, superstar players including Lionel Messi (already sentenced to a €3.7 million fine) and Cristiano Ronaldo, a number of football managers (such as Dmitry Rybolovlev and AS Monaco) and coaches (José Mourinho) have been suspected of tax evasion. Such practices are crimes punished by law though not specific to sport. They must be chased and combated everywhere in the society, including in sport, otherwise sport ethics would definitely be undermined.

Of more concern is that sport is utilised by mafias and money launderers. Sport lends itself particularly well to trafficking in different currencies to launder the money from criminal activities. A sentence against Olympique de Marseille in 1992 revealed a system of laundering money comprising international circulation of commissions deposited in cash in open accounts by intermediaries, nourished by the settlement of fictitious loans, and inflated as withdrawals from Swiss banks in Swiss francs (Bourg 1994). In its 1996–1997 report, the Financial Group for Action on Laundering Capital indicated that illegal gaming—including rigged sport betting—and criminal financing were clearly expanding. In some countries, mafia interference in sport is widespread. The Italian cycling team Roslotto was used in the 1990s for capital flight and laundering dirty money from Russia (Dupuis 1998). Sport manipulation can lead to assassinations of sport chairmen and managers as in Russian football and ice hockey in 1997–1999. In Colombia in the 2000s, 12 football clubs were closely connected with drug-trafficking, a situation which had drifted into match-fixing, illicit bets and eventually murders; average attendance in the Colombian first division has fallen from 23,000 down to 5000 spectators per match over fifteen years. Then sport ethics, integrity and the market sink together, dragged down by no longer “minor” manipulations.

## Multi-faceted Sport Manipulations Involving Corruption<sup>3</sup>

A typology of corrupt sport starts with petty corruption, operating sometimes without money (barter corruption) and goes up to global online fraudulent sport betting, with a special occurrence that is corrupting sports governing bodies.

Petty corruption pertains to on-the-spot corruption between sport insiders. It is the most ancient type of corrupt sport emerging during the course of a sporting contest between two competitors or two teams. One bribes the other to let him/her win or to help him/her winning in the face of opponents. Such on-the-spot corruption is not planned in advance and occurs when an opportunity of securing a win randomly appears in the progress of a sport contest. It distorts a sporting outcome without endangering anyone's life or creating a huge societal issue. For instance, in long-distance cycling races like the Tour de France, in some circumstances winning a stage happens to be bargained between two riders who finish ahead of the peloton, one rider bribing the other (Andreff 2015b).

With barter corruption, an athlete or a team A on the brink of being relegated downward in the sporting hierarchy, and thus in absolute need of a win, offers an athlete or team B to let it win; the bribe is not paid in cash but later on with some planned losses accepted by A in further matches against B. Barter corruption is difficult to detect since there is no money flow or material indices.<sup>4</sup> A fascinating methodology consisted in the creative use of existing data sources (Duggan and Levitt 2002) to detect corruption in Japanese professional sumo wrestling. The authors showed that wrestlers win a disproportionate share of the matches when they are on the margin, but wrestlers who are victorious when on the bubble lose more frequently than would be expected the next time they meet that opponent, suggesting that part of the payment for throwing a match is a future payment-in-kind. In 2000, the Japanese press published articles where two former sumo wrestlers made public the names of 29 wrestlers whom they alleged to be corrupt and 14 wrestlers whom they claimed refused to rig matches. The Japanese Sumo Association attempted to eliminate the eco-

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<sup>3</sup>A more detailed analysis of different types of corruption in sport is available in Andreff (2015a).

<sup>4</sup>Collusion is a variant of barter corruption. In response to vote trading scandals in the 1998 and 2002 Olympics, the International Skating Union introduced a number of changes in its former judging system, obscuring which judge issues which mark. The intent was to disrupt collusion by groups of judges (Zitzewitz 2014).

conomic basis of match rigging by changing the incentive structure of wrestlers on the margin; moreover, the level of public scrutiny increased. Both changes led to a significantly lower number of rigged matches until 2003 (Dietl et al. 2010). However, after the period of the publication process, from 2003 to 2006, the abnormally high winning probabilities of wrestlers on the margin in bubble matches reappeared as well as their loss in the next match with the same opponent with an abnormally high probability.

In similar vein, Jetter and Walker (2017) assumed that an opportunity for collusion can emerge with players on the bubble of direct qualification to upcoming tennis Grand Slam events facing higher stakes than opponents. Jetter and Walker analysed tennis results among players on the cusp of qualifying for the next week's Grand Slam by gaining ranking points, and found evidence that is consistent with the hypothesis since, on the men's tour, bubble players are 5.1 percentage points more likely to beat better-ranked opponents than in comparable non-bubble matches. The statistical results become stronger after the 2013 season when monetary incentives were increased. However, the same evidence does not show up in women's tennis.

Comparable corrupt behaviour is tanking in US college basketball (Balsdon et al. 2007) or in closed leagues with a rookie draft system based on reverse-order-of-finish picks for new players entering the league. At a moment in the sporting season, some teams are no longer in contention for the play-offs; they prefer deliberately to underperform and unexpectedly lose games to go down the ranking and therefore improve their pick position on the reverse-order-of-finish draft. As long as players are pressured to throw games without monetary bribes, this tanking strategy is also barter corruption.

Corrupting sport insiders belonging to governing bodies has been alleged or suspected for instance as regards the allocation of the FIFA World Cup to Russia 2018 and Qatar 2022 and of the IAAF Mundial to China 2015 and (unsuccessfully) Qatar 2017 (London got it). In 2010, FIFA suspended two executive members suspected to have sold their votes for allocating the 2022 World Cup to Qatar and the Qatari president of AFC under fraud presumption. Later on, FIFA itself has been under fire with investigations about embezzlement regarding its highest staff members (Blatter, Platini, Valcke and others).

Allocating mega-sporting events or appointing someone to an honorary VIP position in sports governing bodies is often surrounded with creeping rumours of corruption that are difficult to verify empirically (Maennig 2005). Sticking to evidence that has become public, a complaint introduced to the court in 2002 accused the FIFA president of corruption and

embezzlement by diverting funds towards some FIFA members, namely the incumbent presidents of CONMEBOL and CAF. The head of the 2000 Sydney candidature committee openly admitted various questionable aspects of lobbying, including the use of “agents” in charge of obtaining votes or grants to African National Olympic Committees awarded on the eve of the IOC vote. The subsequent Sheridan report published in 1999 established that Sydney 2000 bribed VIPs to become the Olympics host city. A peak of corruption was reached in the allocation of the 2002 Winter Games to Salt Lake City to such an extent that it triggered a whole reform of the IOC, and the exclusion of six IOC executive committee members in 1999 while four resigned of their own accord and ten were officially reprimanded with varying degrees of severity. Executive members of sports governing bodies and government ministers were revealed to have participated in betting scandals in Taiwanese baseball (Lee 2008).

Before globalisation of the sport economy and online betting, a major occurrence of the corrupt sport was already found in sport gambling which provides an opportunity for fraud since it creates an incentive to lose a sport contest through match-fixing. This requires cooperation between sport insiders (players, referees and managers) and outsiders (cronies, occasional bribers and criminals). The 1964 betting scandal in British football is a front-running case. The Italian black market for football bets—*Totonero*—developed alongside with the official and controlled *Totocalcio*; matches were often rigged in relation to *Totonero* betting. The AS Roma club was found to have corrupted referees in 1999. The *Calciopoli* case in the 2000s revealed significant referee corruption. In Spanish and Portuguese football in 2004 and in Brazilian football in 2005, several club managers and referees were arrested and sued for organising fix-related bets. The Japanese *yakuza*s which control the baseball betting system are known to fix matches. Even in the German *Bundesliga*, a referee, Robert Hoyzer, was sentenced to jail for having rigged matches in 2004 on the results of which he was betting himself and in collaboration with Croatian punters and criminals. All this planted the seeds for global betting networks connected through the Internet to match-fixing that emerged in recent years (3 below).

In North America, point shaving is a specific corrupt practice in which an athlete is promised money in exchange for an assurance that his/her team will not cover the point spread. The corruptor then bets on that team's opponent and pays the corrupt player with proceeds from a winning wager. Point shaving has been found to be widespread in National Collegiate Athletic Association basketball by comparing bet and game outcomes with those in professional sports (Wolfers 2006). Borghesi's (2008) results suggest

that unusual patterns previously suspected to be indicators of point shaving are ubiquitous throughout sports and unlikely to be caused only by corruption. An alternative explanation of the anomalies in the distribution of outcomes may be line shading by sports bookmakers.

Legal and illegal gambling markets are intertwined because illicit bookmakers often balance their positions by placing bets at legitimate sports bookmakers. This type of sport corruption is often unveiled only by chance. Referee assignment is the weakest link in the sport chain which is targeted by corruptors. Players are not that strong a link either. Sport insiders must always be involved for this kind of sport corruption to operate smoothly. Thus, the cure, if any, must be applied first within the sport movement itself.

## **Sport Integrity Under Threat: Major Manipulations**

Nowadays, two categories of sport manipulations are major in that they actually threaten the whole sport ethics and integrity and significantly attract criminal outsiders into the sports industry: doping and online betting-related match-fixing.

Athletics<sup>5</sup> and cycling are often in the headlines for unveiled doping scandals though over time doping seems to have spread through much of elite sport. Mass industrialised doping penetrated cycling in the 1990s with the introduction of blood congealing and self-transfusion techniques, testosterone and erythropoietin (EPO) in doping protocols. The 1998 Festina doping scandal in the Tour de France triggered the process which led to the creation of a World Anti-Doping Agency (WADA) in November 1999 that strengthened the fight against doping. The number of revealed doping cases increased during the 2000s. From 2007, athletes were subjected to having to have a biological passport, a longitudinal anti-doping follow-up and geo-location. The apparent increase in reported doping cases in 2007–2009 may have resulted from this more stringent anti-doping fight followed by a decline in doping sanctions in the 2010s; an optimistic interpretation is that

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<sup>5</sup>In November 2015, the Russian Athletics Federation was suspended for a state-organised doping system of athletes selected in the national squad for the athletics world championships. Further investigations have found that this system was extended to Russian participants in the London and Sochi Olympics.

WADA and national anti-doping agencies have become increasingly efficient. From 1999 to 2010, the Tour de France has lost nine out of its twelve yellow jersey winners with Armstrong, Landis and Contador ex post disqualifications. It is obvious that doping has heavily distorted sporting outcomes and this may be damaging for the credibility of sport in the long run.

The fight against doping relies on a traditional approach claiming that it is a fraudulent behaviour and as such must be analysed through the lenses of the economics of crime (Becker 1968) as adapted to sports (Maennig 2002). In the model:

$$E(G_d) = E(R_w) - C_d - E(S) > 0 \quad (1)$$

$$E(G_d) > D \quad (2)$$

where  $E(G_d)$  stands for the value of the expected net gain derived from doping,  $E(R_w)$  for expected revenues earned thanks to doping,  $C_d$  for the actual cost of a doping programme and  $E(S)$  for the expected cost of sanctions if tested positive and caught. An athlete makes the decision to dope if the expected net gain is positive. As assumed by Becker, anyone has some personal ethical values, including those athletes intending to dope, so that the latter transgress to some point their own values when undertaking a doping action; there is a non-monetary disutility  $D$  of doping to the athlete. A second condition for him/her to go on doping is that profitability must be bigger than this disutility.

Policy recommendations are straightforward: lengthen the list of forbidden substances to raise the cost of doping, increase the cost of sanctions by heavier penalties and push up the disutility of doping through athletes' ethical education. The 1988 anti-doping international chart is based on a list of methods and substances forbidden by the IOC medical commission. WADA has not changed this approach: an athlete is tested positive when a forbidden substance is found in his/her body beyond a pre-defined quantitative threshold. The efficiency of anti-doping has remained unevenly efficient due to the following flaws (Andreff 2015c):

1. a list of forbidden doping substances and techniques creates an incentive to innovate in pharmaceutical products and blood treatment protocols;
2. innovation supplies new performance-enhancing substances that will be off the list;
3. all that not forbidden by the list is supposed to be allowed;