

Management, Organisation und  
ökonomische Analyse, Band 1  
Hrsg. Peter-J. Jost

Cedric Duvinage

**Referees in Sport**

*Their Economic Role*

Cedric Duvinage

## **Referees in Sports Contests**

# **GABLER RESEARCH**

## Management, Organisation und ökonomische Analyse, Band 14

Herausgegeben von Professor Dr. Peter-J. Jost  
WHU – Otto Beisheim School of Management, Vallendar

In den vergangenen zwei Jahrzehnten hat sich ein neuer mikroökonomischer Ansatz entwickelt, der nicht wie die traditionelle neoklassische Analyse auf den Marktbereich beschränkt ist, sondern der grundsätzlich für die Analyse sozialer Interaktionssituationen geeignet ist. Informationsökonomie, Spieltheorie, experimentelle Studien, Neue Institutionenökonomie und Ökonomische Psychologie sind wichtige Bausteine dieses ökonomischen Ansatzes.

Ziel der Schriftenreihe ist die Anwendung und Weiterentwicklung dieses Ansatzes auf betriebswirtschaftliche Fragestellungen. Gegenstand der Untersuchungen sind die unterschiedlichsten unternehmensinternen Probleme aus den Bereichen Finanzierung, Organisation und Strategisches Management. Die Reihe soll so zu einer mikroökonomischen Fundierung des Faches beitragen.

Cedric Duvinage

# **Referees in Sports Contests**

Their Economic Role  
and the Problem of Corruption  
in Professional German Sports Leagues

With a Foreword by Prof. Dr. Peter-J. Jost



**GABLER**

**RESEARCH**

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To my brother and my parents

# Foreword

Over the past few years, the role of the referee has been criticized considerably in professional German sports leagues: Mistaken calls that substantially influence the outcome of games are daily fare, and even deliberate game manipulations in favor of one of the competing teams or individual competitors have increasingly become the basis of public discussions. The scandal involving the former soccer referee Robert Hoyzer, who received considerable kickbacks for purposely manipulating the outcomes of professional soccer games in 2005, leading to a permanent ban from supervising games by the DFB, is only one of many examples that could be mentioned here.

If we consider the criticism of the role of the referee in a more differentiated way, two contextual interrogations arise: On the one side, mistaken calls in sports are based on an inherent misjudgment of game situations - either because of distortions of the human intake and processing of information or because of a deficient technical or personal support of the referee. The fundamental question here concerns the meaning of the referee with respect to the quality of the game: To what extent does the contribution of the referee foster a team's legitimate actions in a game on the one hand, and to what extent does it contain a team's irregular activities on the other hand? On the other side, corrupt delinquencies are based on a conscious

error of judgment of game situations by the referee. In the course of this, the question of an efficient incentivization mechanism by sports associations is of prior interest: To what extent can changes in the rules of the game or monetary and immaterial incentives reduce or prevent a referee's propensity for corruption?

Cedric Duvinage's work addresses exactly these two questions: His objective is to provide answers to these questions in a game theoretical framework and to derive recommendations therefrom. From a scientific perspective, this intention is downright ambitious and takes up an academic void: The few existing studies that address the role of referees in sports are all of empirical or experimental nature; a theoretical elaboration of this topic is still missing.

Mr. Duvinage's work at hand excels to do exactly that in an outstanding way. However, not only theoretically interested readers but also those who are interested in sports and in the inferences for the improvement of the quality of referees as well as for a successful corruption prevention benefit from his work. I wish this work a respectively wide reception.

Peter-J. Jost



# Acknowledgements

No matter whether at the professional or at the amateur level, all enthusiastic athletes and sports fans sooner or later make their own experiences with referees; certainly some good, but probably also some bad. Loving the game as a small forward on the basketball court over the course of many years, I have surely made mine.

However, while the high degree of sports commercialization has immensely increased the economic importance of sports referees, professional German sports leagues seem to have developed an evermore appearing corruption problem taking the occasional irritation about seemingly incompetent referees to a whole new level. For this reason, the study of sports referees deserves the attention of academic and economic research.

My particular personal relation to this topic as well as my interest in the well-being of the sports society surely boosted my motivation for intrinsic research in this area. But the completion of this project would not have been possible without the support of a special group of individuals.

Foremost, I would like to thank my academic advisor and dissertation supervisor, Prof. Dr. Peter-J. Jost, who showed tremendous interest in my research through countless discussions to a cup of tea, providing me with many helpful impulses and ideas. Furthermore, I would like to thank Prof.

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I am also very thankful for the great support of all doctorate colleagues and friends without whom my time as a doctorate student by far would not have been as much fun and as enjoyable as it was. I especially thank all of those who took their time to share their own experiences with and as referees with me. The development of this dissertation irrefutably benefitted from these insightful chats and discussions.

Finally and most importantly, I would like to show my grand appreciation for the unconditional support of my family. I especially thank my greatest supporters and sponsors, my brother Christopher as well as my parents Peter and Angela, who I dedicate this thesis to.

Cedric Duvinage

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# List of Abbreviations

|                |  |
|----------------|--|
| <b>ad</b>      | to   |
| <b>Art.</b>    | Article  |
| <b>BC</b>      | Before Christ  |
| <b>BGB</b>     | Bürgerliches Gesetzbuch (German Civil Code)              |
| <b>BGH</b>     | Bundesgerichtshof (Supreme Court)                        |
| <b>cf.</b>     | confer (compare)   |
| <b>DBB</b>     | Deutscher Basketball Bund (German Basketball Federation) |
| <b>DBL</b>     | Deutsche Basketball Liga (German Basketball League)      |
| <b>DFB</b>     | Deutscher Fussball Bund (German Soccer Federation)       |
| <b>DFL</b>     | Deutsche Fussball Liga (German Soccer League)            |
| <b>DHB</b>     | Deutscher Handball Bund (German Handball Federation)     |
| <b>DHL</b>     | Deutsche Handball Liga (German Handball League)          |
| <b>DPA</b>     | Deutsche Presse Agentur (German Press Agency)            |
| <b>etc.</b>    | et cetera (and other things)                             |
| <b>et al.</b>  | et alii/aliae (and others)                               |
| <b>e.g.</b>    | exempli gratia (for example)                             |
| <b>et seq.</b> | et sequentes (and the following)                         |

|                  |  |
|------------------|--|
| <b>FA</b>        | Football Association   |
| <b>FIFA</b>      | Fédération Internationale de Football Association<br>(International Football Federation) |
| <b>FIVB</b>      | Fédération Internationale de Volleyball<br>(International Volleyball Federation)         |
| <b>GG</b>        | Grundgesetz (Basic Constitutional Law)   |
| <b>i.e.</b>      | id est (that is)   |
| <b>IHF</b>       | International Handball Federation  |
| <b>LHS</b>       | Left Hand Side   |
| <b>Marg. No.</b> | Marginal Note  |
| <b>NBA</b>       | National Basketball Association  |
| <b>p.</b>        | Page   |
| <b>para.</b>     | Paragraph  |
| <b>pp.</b>       | Pages  |
| <b>R&amp;D</b>   | Research and Development   |
| <b>RHS</b>       | Right Hand Side  |
| <b>RuVO</b>      | Rechts- und Verfahrensordnung (Rules of Law and<br>Procedure)                            |
| <b>StGB</b>      | Strafgesetzbuch (Criminal Code)  |
| <b>StPO</b>      | Strafprozessordnung (Code of Criminal Procedure)   |
| <b>UEFA</b>      | Union of European Football Associations  |
| <b>WADA</b>      | World Anti-Doping Agency   |
| <b>ZPO</b>       | Zivilprozessordnung (Code of Civil Procedure)  |



# Chapter 1

## Introduction

*Heaven and Hell decide to fight their differences by organizing a soccer match. Before the game, God proudly brags: "We've got all the star players!" Yet, the Devil counters: "So what? We've got the referees!"<sup>1</sup>*

### 1.1 Motivation

With the increasing commercialization of professional sports and the rising public enthusiasm about various national and international sports events, professional sports referees are increasingly becoming the target of public scrutiny and criticism. Not long ago, during the round of sixteen match of the 2010 FIFA World Cup, England versus Germany, the Uruguayan referee Jorge Larrionda disgruntled many English soccer fans by disallowing an irrefutable goal for England. At the same time, many German soccer fans celebrated Larrionda's mistake as the revenge for the legendary "*Wembley*

---

<sup>1</sup> Freely translated from Steinke, Bodmer and Tophoven (2010, p. 64).

*Goal*" during the World Cup Final in 1966.<sup>2</sup>

The historic soccer rivalry between England and Germany vividly exemplifies that referees are undeniably a critical part of the game, and that it is not unusual for their judgments to ultimately determine its outcome. Given the immense commerce involved in some types of sports, incompetencies by referees, independent of whether they are deliberate or not, can cause a serious economic damage to competitors. This poses the question of why sports associations started availing themselves of the institution of referees in the design of professional sports contests in the first place.

At first sight, the introduction of referees might simply be explained by the contention that there has to be an objective supervisor responsible for the enforcement of the rules to ensure that competitors righteously attain the occasionally large benefits from winning a contest. However, the economic reasoning behind the role of referees goes far beyond this point.

As any competitive athlete can probably approve, a referee can significantly influence the nature of a game. The reason being that competitors typically adjust their playing strategies to the performance of the referee in the pursuit of maximizing their probabilities of success. From this follows that sports associations can use the referee in connection with the pre-specified rules of the game as an intrinsic instrument of design, so as to maximize the demand for its sports events.

Yet, blatantly wrong decisions such as that of Larrionda often tend to make enthusiastic spectators question the impartiality of a supervising referee. Indeed, recent corruption scandals in the professional German Soccer League (DFL, hereinafter also referred to as the "Fussball Bundesliga") and the professional German Handball League (DHL, hereinafter also referred to as the "Handball Bundesliga") provided ample reasons for developing

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<sup>2</sup> For more information, see Gödecke (2010), Reschke and Knaack (2010) and Volkery (2010).