



World Scientific Series in Finance - Volume 18

Sports Analytics

by

Leonard C Maclean

Dalhousie University, Canada

William T Ziemba

University of British Columbia, Canada

**What Others
Are Saying...**

This book is a collection of applications of analytic techniques to a number of popular sports including baseball, basketball, hockey, Jai Alai, NFL football and horseracing. We focus on both the statistics of the sporting events and betting strategies on the events. The subject is fascinating as there are many twists and subtle complicated decisions.

Sports analytics applies mathematical and statistical methods to important questions in the structure and performance of sporting activities using the same basic methods and approaches as data analysts in other disciplines.

Sports games and events are a fruitful area for study and to evaluate betting strategies as there is extensive data and mean reversion. With prices changing continuously, risk arbitrage bets can be made. Moreover, little errors, like a penalty to a player or an error in a call by a referee, can change the score of a game and corresponding betting prices. The collection and analysis of in-game data can inform players, coaches and staff on effective decision making during sporting events.

Novel features of the book include: an analysis of who were the greatest baseball batters; analyses of the players most important to team success (and they are not necessarily the best players) in basketball, NFL football and hockey; a tutorial on risk arbitrage and its applications to NFL football and NBA basketball; a discussion of many ad hoc decision rules by coaches and players and what was really optimal; in the racing section we discuss breeding, the analysis of various bets like the Rainbow and ordinary Pick 6, a discussion and betting on the most important races and a visit to the Breeders' Cup with Ed Thorp to demonstrate the place and show system in action.

Readership: For Sports fans, coaches, players and sports bettors; and students and users of arbitrage and risk arbitrage strategies.

"MacLean and Ziemba bring their insights from financial theory to the analysis of sports betting. Insights from each discipline are useful to those wishing to understand both."

Edward O Thorp

author of Beat the Dealer and A Man For All Markets

"This is a tour de force for the sports enthusiast wanting to better understand strategies, and for sports bettors wanting advice on how to analyze team sports and devise winning strategies. The authors provide this, including real bets they made in a number of key sports with individuals and teams including NFL football and top quality horse racing. There are also great new insights including who are the best players for actual team performance and what to do in various situations in NFL football. This is a textbook plus a guidebook for all sports enthusiasts and I recommend it highly."

Dr Leighton Vaughan Williams

Professor of Economics and Finance

Director, Betting Research Unit

Nottingham Business School, Nottingham Trent University



515pp | Pub Date: December 2021

Paperback | **US\$39.95 / £35** | 978-981-124-752-1

Hardcover | **US\$85 / £75** | 978-981-124-751-4

eBook-Individuals | **US\$29.90 / £29.90** | 978-981-125-022-4

Order your copy at <https://doi.org/10.1142/12566>

* Offer is not valid in conjunction with any other offers or promotions.