

### BEHAVIOUR AND INCENTIVES IN ECONOMICS THE CASE OF SOCCER

Economics and Politics

### **Course contact hours:** 45 **Recommended credits:** 6 ECTS – 3 US credits

### OBJECTIVES

This course takes soccer as a laboratory to illustrate theories and discuss empirical evidence and methodologies about economic institutions, incentives and behavior in human societies. We study 1) professional soccer as a global industry within an institutional framework, and 2) professional soccer as a laboratory of wider economic and behavioral knowledge. Soccer is widely followed and generates a great amount of information. This is used here to explore the value of economic and social theories, and to learn about empirical tests and techniques related to these theories. Many examples in this course are based on FC Barcelona, but also on a variety of clubs, leagues and competitions.

### REQUIREMENTS

Basic knowledge of Economics (and soccer).

### LEARNING OUTCOMES

- 1. To understand the determinants of demand in the soccer industry.
- 2. To be able to link the institutions of soccer to the analysis of economic institutions.

3. To reflect about the role of inequalities and discriminations through the role they play in soccer and other sports.

4. To be able to use basic game theory to analyze strategic interactions in society and sports.

5. To reflect about the rationality assumption in economics and how it can be tested with sports and soccer data.

6. To understand the role of incentives and how they shape the role of agents such as managers and referees.

7. To distinguish efficiency from equity and to identify examples of inefficiencies in sports.8. To understand the mechanisms of the transfer market and the role that taxation and regulation play in it.

9. To analyze the costs and benefits of large sports events, including the soccer World Cup.

10. To obtain an introductory knowledge about evolutionary economics and social sciences and to apply it to the evolution of soccer tactics.



CONTENTS

Introduction (2 sessions)

-Why Soccer and Economics.

-The size of the soccer industry.

-The global-local trade-off and the collective-individual one.

-A global industry: common rules, a hierarchy of competitions, an almost common calendar.

-Soccer illustrates economic concepts: inequality, collusion, protectionism, incentives, demand, innovation...

Study Abroad

Programmes Universitat Autònoma de Barcelona

-Soccer illustrates concepts from political economy: globalization, populism, corruption. -The role of game theory.

-Behavioral Economics and Uncertainty: over-confidence, regression to the mean, wishful thinking, hindsight bias, stories, loss aversion...

-The dark side of soccer: nationalism, corruption, racism, violence, discrimination.

1. Demand and Institutions in Global Soccer (4 sessions)

-Demand: preferences, elasticity, consumer surplus, addiction, uncertainty.

-Monogamy and polygamy in soccer.

-Tribalism.

-Violence and demand.

-Competitive balance.

-The appropriability problem.

-Costs and Performance: the economics of stars and outliers.

-Sources of talent: distribution of talent, aging curves and birth dates.

-The soccer industry: players, agents, managers, referees, clubs, leagues, federations, media and fans.

-The "make or buy" decision: academies and transfer market (also, players on loan and free agents).

-Clubs: profit maximization vs. win-maximization, non-profit clubs, "sugar daddies," behavioral firms and idiosyncratic CEOs.

-Democracy and populism in soccer: the example of electoral campaigns in non-profit clubs.

-Globalization and soccer.

-Club stability, the finances of clubs and fair play.

-Strategy/management/capabilities, determinants of performance cycles.

-Competition and cooperation in soccer. War-like competition.

-Institutions that internalize externalities: leagues, national teams and federations.

-Differences between most soccer leagues and professional US sports leagues.

-Corruption: private governance, federalism and an unregulated global monopoly.



2. Inequality and discrimination in soccer (5 sessions)

-Impact of globalization on the inequality between club teams and between national teams.

- -Dominance in soccer leagues.
- -Tycoons, the global concentration of capital and the soccer industry.
- -The economics of superstars.
- -Believe in a fair world and why we tolerate many inequalities.
- -Racial discrimination and the "Salah effect".
- -Gender discrimination.
- -The determinants of success for men's soccer and women's soccer
- 3. Rationality in Soccer (5 sessions)

-The determinants of rational behaviour.

-Players' rationality: shooting penalties and psychological pressure.

-Game Theory and Nash Equilibrium in pure and mixed strategies.

-Empirical evidence about mixed strategies from penalty kicks.

-Social norms: action bias and omission bias.

-Are players always rational?

-Why all the others are less rational.

### 4. Incentives in Soccer (5 sessions)

-The theory of incentives in economics: intrinsic and extrinsic, monetary and non-monetary incentives.

-Individual effort with team incentives and coordination.

-Behavioral economics and incentives.

-The home-field advantage: hormones, referees and local conditions.

-Empirical techniques: instrumental variables, natural experiments, field experiments, lab experiments.

-Rules and referee behaviour: creating, enforcing and influencing the rules.

-Why was the soccer industry so reluctant to introduce technology? The impact of VAR.

-Institutions and incentives: the example of English referees.

-Unintended consequences: the example of the three-point rule.

-The role of the manager and efficiency measurement.

-The effect of team diversity in productivity: "galácticos", youth academy players, linguistic diversity, "O-Ring technologies"...

-Overconfidence and the Sports Illustrated Jinx.

-Managers' loss aversion.



### 5. Efficiency in Soccer (5 sessions)

-Efficiency in economics.

-The Player Transfer Market: analogy to takeovers and auctions, endowment effect, scouting.

-Financial "fair play" rules.

-The Moneyball effect in soccer.

-Statistics, uncertainty and predictions.

-Competitive balance and uncertainty: predictions and ex-post rationalization. Share price movements and betting.

-The myth (?) of the "hot hand" and streaks.

-Financial market efficiency.

-Public policies such as taxation in soccer: the example of the Beckham Law and similar initiatives, luxury taxes and global taxes.

-Competition and Anti-trust in Soccer, including collusion, vertical issues and state aid.

-The costs and benefits of organizing big sports events such as Soccer World Cups.

-The Coase Theorem, the Champions League and a European Super-League.

6. New frontiers of economics, social sciences and the analysis of soccer (2 sessions)

-Evolutionary social science: evolutionary game theory, the evolution of tribalism, tactics and the expansion of total football.

-Complex dynamic systems: a soccer team as an open complex dynamic system, or as a superorganism.

-Network Analysis: team structure, tactical formations, network dynamics and key players. -Neuroscience: what's in the mind of the penalty kicker.

ASSESSMENT CRITERIA

-A take-home **midterm exam** (20% of the final grade).

-1 ten-page **essay** to be presented in class (20%).

-A final exam (50% of the final grade).

-Class Participation and attendance 10%.

BIBLIOGRAPHY

It is strongly recommended to carefully read at least one of the references in bold:

-Anderson, C.; Sally, D. (2013), The Numbers Game. Why Everything You Know About Football Is Wrong, Penguin Viking.

-Andreff, Szymanski (2006), Handbook of the Economics of Sport, Edward Elgar.



-Bar-Eli, M.; Plessner, H.; Raab, M. (2011), Judgement, Decision Making and Success in Sport, Wiley-Blackwell.

-Dixit, A.K.; Nalebuff, B.J. (2008), The Art of Strategy, Norton.

# -Dobson, S.; Goddard, J. (2011), The Economics of Football, Cambridge University Press. Second edition.

-Gladwell, M. (2008), Outliers. The Story of Success, Little Brown.

-Kahneman, D. (2011), Thinking, Fast and Slow, FSG.

-Krueger, A.B. (2019), Rockonomics. What the Music Industry Can Teach us about Economics (and Our Future), John Murray Publishers.

### -Kuper, S.; Szymanski, S. (2012), Soccernomics, Nation Books. Second Edition.

-Lyttleton, B. (2014), Twelve Yards. The Art and Psychology of the Perfect Penalty, Bantam Press.

#### -Moskowitz, T.J.; Wertheim, L.J. (2011), Scorecasting, Crown Archetype.

-Neale, W. (1964), the peculiar economics of professional sport: A contribution to the theory of the firm in sporting competition and in market competition, Quarterly Journal of Economics, 78: 1-14.

### -Palacios-Huerta, I. (2014), Beautiful Game Theory. How Soccer Can Help Economics, Princeton University Press.

-Rottemberg, S.(1956), The baseball players' labor market, Journal of Political Economy, 64: 242-258.

## -Szymanski, S. (2009), Playbooks and Checkbooks. An Introduction to the Economics of Modern Sports, Princeton University Press.

### -Szymanski, S. (2015), Money and Soccer. A Soccernomics Guide, Nation Books.

-Szymanski, S.; Zimbalist, A. (2006), National Passtime: How Americans Play Baseball and the Rest of the World Plays Soccer, Brookings Institution Press.

-Shmanske, S.; Kahane, L. H. (2012), The Oxford Handbook of Sports Economics, Volumes 1 & 2, Oxford University Press.

-Silver, N. (2012), The Signal and the Noise. Why So Many Predictions Fail but Some Don't, Penguin.

-Sumpter, D. (2016), Soccermatics. Mathematical Adventures in the Beautiful Game, Bloomsbury Sigma.



-Taleb, N.N. (2004), Fooled by Randomness. The Hidden Role of Chance in Life and in the Markets, Penguin Books.

-Transparency International (2016), Global Corruption Report: Sport, available at http://www.transparency.org/news/feature/global\_corruption\_report\_sport

-Zimbalist, A. (2015), Circus Maximus, Brookings Institution Press.