

Index

- Abramovich, Roman 23, 198, 243
AC Ajaccio 241–2
AC Milan 206
 as part of Fininvest Group 238
Adelaide Crows 62–3
AFL Players' Association (AFLPA) 54
Arrow-Debreu net demand 24
AS Monaco
 acquired by Dmitri Rybolovlev 211
AS Roma 198
Australia
 Federal Court of
 Adamson v New South Wales Rugby League (1991) 56, 96
 High Court of
 Buckley v Tutty (1971) 56, 96
Australian Football League (AFL) 4, 51, 53–5, 77, 82–3, 95
 Additional Services Agreement (ASA) 54
 collective bargaining agreement (CBA) 54, 74
 Commission 55–6
 competition license criteria 58
 expansion clubs 5, 61–2, 82–3, 92
 Final Series 53, 62
 Grand Final 54
 league objectives 55–6
 performance criteria 57
 management objectives 55–7
 player drafts 58–9, 79, 82–4, 89–90
 'Father-Son Rule' 95
 Interstate Draft 96
 Mid-Season Draft 96
 National Draft 54–5, 63–72, 74, 81, 91, 95
 Pre-Season Draft 54–5, 65–72
 Rookie Draft 54–5, 65–72
 Premiership Season 53
 reform of 'special assistance' regulations 74
 Rules 53–5, 65–72
 stated objects of 56
 Total Player Payment Cap (TTPC) 54
Australian National Water Polo League 59
Azerbaijan 211

bankruptcy 20–21, 193–4, 201, 203, 205–6
Bayer AG 238–9
Bayern Leverkusen 238, 243
Belgium
 Flanders 139
 TV market of
 coverage of Olympic Games 137
Berlusconi, Silvio 206, 238
Borussia Dortmund 206
Bosman, Jean-Marc 18, 36
 ruling (1995) 28, 155
Brisbane Bears 62–3, 83

Canadian Football League
 expansion clubs 61
cap on payroll injections 229, 237
 impact of FFP on 237–9, 242, 244
 potential limitations of 235–6
 sponsors 237
capital
 budgets 165
 initial 153, 167
 market 179
 ownership of 6
 raising of 200
capitalism 6, 154, 201
 managerial 177
Chelsea Football Club 19, 198, 243
China, People's Republic of 135
 Beijing 137

- closed team sports league 12
 - regulation of 12
 - standard equilibrium model in 12–13
 - non-equilibrium simulation of 74–83
 - talent units in 12
 - team revenue 12–13
- club bail-outs 211
- clubs debt 175–7, 179, 194–5, 198, 201–3, 205–7, 210–11, 213–17, 219
- clubs deficit 175–6, 182, 190–93, 198, 200–207, 213–17, 219
- club governance 175–7, 179–82, 190–95, 198, 200–201, 203–7, 211–18
- clubs listed at the stock market 176, 179, 181, 192, 195, 198–200, 215, 218
- club management 176–7, 179–80, 182, 192–4, 204–7, 212–16, 218–19
- Competitive Balance Ratio (CBR) 114–15
 - link to HRCB 115
- competitive imbalance 55–6, 104–6, 128
 - coefficient of variation 80–81, 88
 - formalization 106–7
 - Herfindahl Ratio of Competitive Balance (HRCB) 114
 - link to CBR 115
 - measurement of 80–81, 90, 105–7
 - perfect (PCI) 107–10, 113, 120–21
 - distribution 119
 - perfect competitive balance (PCB) 107–8, 119–20
 - distribution 121
 - Gini index use with 117–18, 122–7
 - Two Blocks of Teams 125
 - principle of transfers 120–21
 - size change of leagues 110–11
 - standard deviation of number of wins 90, 104–5
- corporate governance 6, 175–6, 181
- franchise models 181–2
 - bad 176, 181–2, 190–94, 198, 200–201, 203–5, 207, 211, 213–14, 217
 - good 181, 190
- impact of floating shares on 195–6
- relationship with SBC 203–4
 - structures
 - strong 179–80
 - weak 179–80
- de Coubertin, Pierre 134
- credit 22, 152–5, 157, 166
 - salary cap 60
 - soft forms of 6, 155–6, 165
 - trade 202–3
- disequilibrium 24–5, 40
 - economies 25–6
 - concept of 23–4
 - leagues 6
 - media coverage 140–41
 - model
 - labour market 50
 - product market 50
 - team sports league model 26–7, 36–8
 - missing markets 37–8
 - spillover effects 39–40
 - repressed inflation 23
- Dow Jones (DJ)
 - Industrial Index 199
 - StoXX Europe Football Index 198–9
- draft choice error (DCE) 79, 87
 - association with player productivity 85–6
- English Premier League (EPL) 19, 40, 104, 155, 241
- Essendon Football Club 95
- European Commission 156
- European Union (EU) 206
 - competition policy of 22
- Excess demand 18, 20–21, 24–36, 39–43
- Excess supply 18, 20, 24–6, 29–30, 35–6, 40, 42–4
- Fan behaviour 32–3
- FC Barcelona 22, 155, 206, 243
- FC Basel 243
- FC Porto 198
- FC Steaua Bucuresti 243
- FC Viktoria Plzen 243
- Fédération Internationale de Football Association (FIFA) 31
 - World Cup
 - Brazil (2014) 140
- Federer, Roger 140

- Fenerbahce 195
 Fininvest Group 238
 Fininvest S.p.A. 238–9
 Finland
 Helsinki 132
 Fitzpatrick, Mike
 AFL Commission Chairman 56
 Fixed supply of talent 12, 14, 16
 France 22, 200
 French TV market 140
 Ligue 1 155, 212, 241
 aggregate balance sheet of 207,
 211
 broadcast rights of 213–14
 deficits in 207
 Ligue 2 216
 Ligue du Football Professionnel (LFP)
 215–16
 Direction Nationale de Contrôle de
 Gestion (DNCG) 207,
 215–17
 Lyon 245
 Paris 134, 241–2, 245
 Fremantle Dockers 64, 83–5
 French Football Federation 215–16

 Galatasaray 195
 IPO of 198
 share value of 199
 gender 5, 131–2, 134–9, 141, 143–5,
 147
 Gerling 206
 Germany 200
 Berlin 132
 Bundesliga 155
 Munich 244
 Potsdam 132
 Gini index 106
 concept of 117
 use with PCB 117–18, 122–7
 Glazer, Malcolm 23, 198
 Gold Coast Suns 62, 64, 81, 83, 85, 92
 draft selections 55
 entry to AFL (2011) 51, 57, 85
 recruiting assistance 65–7
 Greater Western Sydney (GWS) Giants
 62, 64, 81, 83, 92
 draft selections 55
 entry to AFL (2012) 51, 57
 recruiting assistance 68–72

 Greece 157
 Athens 137

 hard budget constraint 2, 6, 21, 152–3,
 169, 202, 213, 229, 232, 244
 Almost Hard Budget Constraint
 (AHBC) 158
 concept of 153
 concept of 201
 for football managers 229
 for PTSC 167
 recommendations for movement
 toward 213–14
 salary cap 215
 Hirschmann-Herfindahl Index (HHI)
 113–14
 concept of 105
 corrected 110–11
 formal link with relative standard
 error (RSE) 111–13
 measurement of 116
 Hungary 153

 idealized standard deviation (RSD) 90
 initial public offering (IPO) 195, 200
 examples of 198–9
 limitations of 198, 215
 Inter Milan 206
 Iso Competitive (Im)Balance curves
 115–16
 Italy 22
 Rome 133
 Serie A 155
 budget constraints in 155
 TV market of
 coverage of Olympic Games 137

 Japan 135

 Késenne, Stefan 2, 14–17, 19, 40–41,
 43–4, 50, 73, 104, 151, 158, 171,
 240
 Keynesianism
 unemployment regime 24
 Kontinental Hockey League (KHL)
 player drafts 59
 Kornai, Janos 2–3, 6, 24–5
 concept of soft budget constraint 4,
 6, 20–22, 151–3, 157, 159–60,
 166, 201, 211–12

- labour 28
 - market 1, 14, 17, 26, 28, 36, 50
 - closure of 12
 - disequilibrium/ disequilibrium model 30, 50
 - economic design of 53
 - equilibrium 1
 - globalization of 16
 - player talent demand in 28
 - regulations 4, 51, 53–5, 60, 62, 94
 - segmentation 18, 33, 42
 - marginal revenue productivity of 27–8, 30
 - player drafts 58–60
 - productivity 28
 - segmented 30
- Lazio 195
- Lewis, M.
 - Moneyball* (2004) 52
- limit reference point (LRP) 74, 86, 88–9, 91–2, 94
 - concept of 73
- live games market 31–42
- London 2012 5, 131–3, 135, 138, 146
- Major League Baseball (MLB) 6–7, 158, 181, 217
 - average team asset value in 190
 - Commissioner's Blue Ribbon Panel on Baseball Economics 57
 - expansion clubs 61
 - operating incomes of teams 190
 - player drafts 59, 95
 - sale of teams in 192–3
- Major League Lacrosse (MLL)
 - player drafts 59
- Major League Soccer (MLS) 158
 - player drafts 59
- Mammadov, Hafiz
 - acquisition of RC Lens 211
- Management Strategy Evaluation (MSE) 4, 74–6, 81–2, 84–5, 88, 92–4
 - concept of 74–5
 - management objectives 80–81
 - managerial discipline 179
 - process of 75–6
- Manchester City Football Club 19, 198, 217, 243
- Manchester United Football Club 19, 104, 198, 243
- Mansour, Sheikh (Mansour bin Zayed Al Nahyan) 23, 198, 242–3
- market economies 6, 23, 25, 177, 201
- market for sport sponsorship 37, 41, 44
- market for sport betting and gambling 38, 41
- market spillover effects 37, 39–42, 44
- Mediolanum 238
- Messi, Lionel 18, 30
- Mondadori 238
- Monte Carlo simulation 4, 52, 74
- Morati, Massimo 206
- Nash equilibrium model 16–17
- National Basketball Association (NBA) 7, 61–3, 158, 181, 217
 - Development League (NBADL) 59
 - Draft lottery system of 95
 - Expansion clubs 61–3
- operating losses in 190–91
 - sale of teams in 193
- National Broadcasting Corporation (NBC)
 - coverage of Olympic Games (1992/1996) 135–6
- National Football League (NFL) 6, 16, 61–3, 158, 161–3, 181
 - Expansion clubs 61–3
 - non-profit status of 165
 - operating incomes of teams 182, 190
 - player draft 59
 - Rookie draft 161
 - sale of teams in 192
 - soft taxation of 163, 165
 - stadium construction programme of 166
 - Super Bowl 190
- National Hockey League (NHL) 7, 158, 181, 217
 - asset sales in 193
 - average team value in 191
 - expansion clubs 61
 - operating incomes of teams 191
 - player drafts 59
- National Rugby League (NRL)
 - possible player draft 95

- National Women's Soccer League (NWSL)
 - player drafts 59
- Netherlands
 - TV market of 6
 - coverage of Olympic Games 139, 145–6
- New South Wales Rugby League (NSWRL) 56
 - Internal Draft 59, 96
- North American professional sports teams 61–3, 191–4
- North Korea 135
- not-for-profit organizations 4, 7, 51, 176
 - governance in 7, 200–201
 - principal-agent model view of 200
- Olympique Lyonnais 198
 - IPO of 200
 - share value of 199
 - stockholders in 198
- open team sports league 36–7, 106
 - deregulated 16
 - disequilibrium model 36–7
 - economic equilibrium 17–18
 - TV right revenues 19–20
 - standard equilibrium model in 14–15
 - equilibrium wage 15
 - talent supply in 16–18
- Olympic Games 134
 - International Olympic Committee (IOC) 132–6, 138
 - Olympic Broadcast Services 138
 - media coverage of 5–6, 131–9, 145–6
 - disequilibrium 140–41
 - live streams 138
 - Olympic Charter 134
 - participation of women in 134–7
- organized crime 38
- Paris Saint Germain 241–3
 - debt of 211
 - deficit of 207, 216–17
- Player Drafts 58–9, 63–72, 74, 81–4, 89–90, 95–6
- Port Adelaide Power 64, 83
- principal-agent model 175, 177, 195, 213
 - view of not-for-profit organizations 200
- principle of transfers 5, 120–21, 128
- Prodi, Romano 155
- professional team sports clubs (PTSCs)
 - 152, 161–2, 166, 169–70
 - categorization of 167, 169
 - environmental conditions 158
 - exemption from US anti-trust regulation 160
 - expansion clubs 61–3
- profit maximising (maximisation)
 - 11–13, 15–17, 41, 44, 175–9, 181–2, 190–91, 198, 200–201, 213
- Qatar 23, 242, 245
- Qatar Sports Investment 211
- RC Lens
 - acquired by Hafiz Mammadov 211
- Real Madrid 22, 155, 206
- revenue sharing 14–16
- Rodriguez, Alex 194
- Ronaldo, Cristiano 30
- Rottenberg, Simon 1
 - invariance principle 59
- RSC Anderlecht 243
- Russian Federation 59, 135
- Saudi Arabia 135
- SBC syndrome 152, 154, 156–7, 202–3, 205, 207, 211–13
- Scully, G.
 - views of player exploitation 28, 30
- simulation 51–2, 74–94,
 - advantages of 92–4
 - dynamic 79
 - electronic 52–3
 - management objectives 80–81
 - non-equilibrium 51
 - of natural resources 75
 - player productivity function 80
 - reference points (RP) 73–4
 - Sports Synthesis 4, 51, 58, 64, 73, 77, 83, 92–5
 - stochastic 77
- socialism 6, 152–4, 201–2
 - post- 157
- soft budget constraint (SBC) 4, 6, 20–22, 153–4, 161–2, 169, 175–6, 200–202, 205–7, 211–14, 216, 230

- agency issues
 - concept of 177–8
 - managerial/owner discipline 179
 - strong/weak corporate governance structures 179–80
- American sport 157–60
 - college team sport 158
 - soft pricing 160–61
- detrimental managerial incentives 230–33
- development of theory of 151–3, 157, 159–60, 166, 201–2
- examples of 153, 202–3
- in European professional football 154–5
 - soft accounting 156–7, 165–6
- soft administrative pricing 156
 - soft investments 156, 163–4
 - soft subsidies 156, 163–5
 - soft taxing 156, 162–3
 - softness of credit conditions 156, 165–6
- Inverse Softness 160
- managerial moral hazards 231–2
- managerial rent-seeking 232
- preconditions for 22
- relationship with bad governance 203–4
- role of FFP 233–4, 236–7
- salary bubbles 231
- Sonnenschein-Debreu-Mantel theorem 24
- South Korea
 - Seoul 135
- Spain 22, 238
 - banking sector of 22
 - Barcelona 136, 244
 - Madrid 244
 - Primera Liga 155
 - budget constraints in 155–6
 - club survival rate in 206
- sports economics 2–3
 - disequilibrium 2
- stadium capacity 31
- standard equilibrium model 11–12, 50
 - budget constraint 20–22
 - hard 21
 - soft 20–21, 23, 29
 - closed team sports league 12–13
 - open team sports league 14–15
 - Sweden 135
 - take over discipline 177, 195, 200–201, 240–42, 244
 - talent 11–20, 23, 26–30, 32–3, 35, 40–44
 - heterogeneous 4, 18
 - homogenous unit of 12–13, 18, 27, 29
 - journeymen players 2, 18, 29–30, 36, 38, 40–41, 44
 - player productivity modelling 79–80
 - superstars 2–4, 18, 23, 28–30, 35–6, 39–42, 140, 198–9, 203, 212, 215
 - Tampa Bay Lightning 194
 - target reference point (TRP) 74, 86, 88–9, 91–2, 94
 - concept of 73
 - team 175–7, 179–83, 187, 189–95, 199–200, 203–4, 207, 211, 217–19
 - acquisition 192, 194, 200, 212
 - asset sale 192–3
 - asset value 182, 190–91, 194
 - bankruptcy 179–80, 182, 192, 194–5, 198, 202–3, 206, 211
 - ownership 177, 179–81, 194, 218
 - televised sports market 33–4, 36–8, 131–7, 145–7, 211–12
 - average minute audience (AMA) 141, 143–5
 - gender-based 141, 143–5
 - broadcasting rights 40
 - auctioning of 212–13
 - free-to-air TV channels 33–4, 41
 - market for
 - upstream 41
 - Pay-per-view TV channels 34–5, 41
 - sports sponsorship 37–8
 - viewers behaviour 19–20, 31, 33–7, 40–41, 44
 - viewer utility 34
 - visual characteristics of 133–4
 - unemployment 2, 18, 29–30, 36–7, 40
 - classical regime 24
 - Keynesian regime 24

- Union of European Football Association (UEFA) 21, 191, 204–5, 214, 229
- Champions League 240, 243
- Club Financial Control Body 216–17
- Financial Fair Play (FFP) 2, 7, 23, 35–6, 42, 157, 170, 176, 204–5, 207, 213, 216–18, 228, 233–4, 236–7, 239–40, 242, 244–5
- New Club Licensing 7
- United Arab Emirates (UAE)
 - Abu Dhabi 242
- United Kingdom (UK)
 - Brighton 243
 - Ipswich 243
 - Isle of Man 243
 - London 5, 131–3, 135, 138–9, 146, 241, 243
 - Manchester 243
- United States of America (USA) 59, 135, 152–3, 161, 165, 169
 - Atlanta, GA 133
 - New Orleans, LA 164
- Victorian Football League (VFL) 59, 63–4
 - expansion of 53
- Walrasian equilibrium model 12–13, 17, 40, 42, 50
- West Coast Eagles 63
- Win maximising (maximisation) 11, 15–17, 19–20, 25–8, 30, 40, 42, 177, 195, 200–201
- Women's National Basketball Association (WNBA) 158
 - expansion clubs 61
 - player drafts 59

'This is an interesting book that is worth reading for every sports economist because it introduces a thought provoking approach to the growing field of sports economics. The authors show how disequilibrium economics may improve our understanding of puzzling economic phenomena in sports. I congratulate the editor and the contributors for this new book and the novel perspectives provided therein!'

Helmut M. Dietl

University of Zurich, Switzerland

'This book sounds like a theoretical breakthrough towards a new approach in sports economics that generates important insights into the issue of financial fair play in football.'

Andrea Traverso

Head of Club Licensing and Financial Fair Play, UEFA