TRANSITION TO ADVANCED MARKET INSTITUTIONS AND ECONOMIES

Editors:
Z. Nahorski
J.W. Owsiński
Systems Research Institute
Polish Academy of Sciences
Newelska 6
01-447 Warsawa
Poland

T. Szapiro
Warsaw School of Economics
Institute of Econometrics
Al. Niepodległości 164
02-544 Warszawa
Poland
Contents

Preface

I. Elections, coalitions, parliamentary behaviour

Some remarks on game theoretical approach to prediction of formation of parliamentary coalitions. The case of Polish elections of 1997
H. Sosnowska 3

Structuring the set of MPs in Polish Parliament: A simple clustering exercise
J.W. Owsiniski and S. Zadrozny 15

Forecasting voting behaviour using machine learning – Poland in transition
G. Szkatula, J. Hołubiec and D. Wagner 31

II. Choice, conflict, and decision

Some remarks on properties for choice functions
S. Lahiri 45

On the concepts of rationalizability in games
S. Ambroszkiewicz 55

Discrete time dynamic game model for price competition in an oligopoly
S. Bylka, S. Ambroszkiewicz and J. Komar 69

A note on system modelling and control in the case of conflicting objectives
W. Krajewski 91

III. Financial models and portfolio choice

Optimal portfolio for nonstationary security market
A.A. Pervozyanski 101

Bond portfolio management with repo contracts: the Italian case
M. Bertocchi, R. Giacometti and L. Slominski 111

Optimal portfolio choice under a liability constraint
L.S. Zaremba and W.H. Smoleński 131

Multiple criteria linear programming model for portfolio selection
W. Ogryczak 143
IV. Economy, environment, energy

A review of mathematical models in economic environmental problems
Z. Nahorski and H.F. Ravn 165

Control and game-theoretic assessment of climate change: Options for Joint Implementation
J. Scheffran and S. Pickl 203

Uncertainty in energy-economic modelling of the electrical power sector
H.F. Ravn and K. Skytte 213

Modelling a sector undergoing structural change: The case of Danish energy supply
H.K. Jacobsen 231

Decision support method for cost-effective emission control on a regional scale
P. Holnicki and A. Kąuszko 249

V. Transition, international comparisons and relations

Simulating economic transition processes by genetic programming
S.-H. Chen and C.-H. Yeh 265

Indicator space configuration for early warning of violent political conflicts by genetic algorithms
P.I. Ivanova and T.D. Tagarev 287

Transition to advanced market: Transition towards advanced economies?
E. Kovács and Z. Kollár 313

VI. Efficiency and measurement

Means and their applications
S. Ostasiewicz and W. Ostasiewicz 337

The nearest adjoining order method for pairwise comparisons in the form of difference of ranks
L. Klukowski 357

Short-run and long-run efficiency measures for multiplant firms
C. Kao 379

Author index 389