Marisa Faggini • Concetto Paolo Vinci *Editors*

Decision Theory and Choices a Complexity Approach

Springer

Contents

List of Contributorsxiii
Part I General Issues
Coherence, Complexity and Creativity: the Dynamics of Decision Making
Complexity Theoretic Bounded Rationality and Satisficing
Optimisation and "Thoughtful Conjecturing" as Principles of Analytical Guidance in Social Decision Making
Part II Agent Based Models
A New Agent-based Tool to Build Artificial Worlds
Exploration Modes and Its Impact on Industry Profitability
Financial Fragility and Interacting Units: an Exercise
C. Chiarella, S. Giansante, S. Sordi, A. Vercelli
Part III Techniques and Tools
Using Homogeneous Groupings in Portfolio Management

xii Contents

Part IV	Modeling	from	Physics
---------	----------	------	----------------

From Chemical Kinetics to Models of Acquisition of Information: On the Importance of the Rate of Acquisition of Information
Thermodynamic-like Approach to Complexity of the Financial Market (in the Light of the Present Financial Crises)
A Physicist's Approach to Phase Controlling Chaotic Economic Models 205
F.T. Arecchi, R. Meucci, F. Salvadori, D. Acampora, K. Al Naimee
PartV Related Issues
A Note on Complaints and Deprivation
Predictability of SOC Systems. Technological Extreme Events
Ontology Based Risk Management. 235 G. Nota, R. Aiello, M.P. Di Gregorio