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Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1 Introduction (Alan Kirman) -- Part I. Theoretical foundations -- Chapter 2: Systemic risks in evolution of the social complex system (Yuji Aruka) -- Chapter 3: Science of Society (Arnab Chatterjee, Asim Ghosh, Bikas K Chakrabarti) -- Chapter 4: The Evolution of Institutional Behavioral Complexity (J. Barkley Rosser, Jr., Marina V. Rosser) -- Chapter 5: Agent-Based Models and their Development Through the Lens of Networks (Shu-Heng Chen, Ragupathy Venkatachalam) -- Chapter 6: Calculus based Econophysics: Applications to the Japanese

Economy (Jürgen Mimkes) -- Chapter 7: A stylized model for wealth distribution (Bertram Duering, Nicos Georgiou, Enrico Scalas) -- Part II. Complex Network and Sentiments -- Chapter 8: Document Analysis of Survey on Employment Trends in Japan (Masao Kubo, Hiroshi Sato, Akihiro Yamaguchi, Yuji Aruka) -- Chapter 9: Extraction of bigraph structures among multilingual financial words using text-mining methods (Enda Liu, Tomoki Ito, Kiyoshi Izumi, Kota Tsubouchi, Tatsuo Yamashita) -- Chapter 10: Transfer entropy analysis of information flow in a stock market (Kiyoshi Izumi, Hiroshi Suzuki, Fujio Toriumi) -- Part III. Empirical laws in Financial Market -- Chapter 11: Sectoral co-movements and volatilities of Indian stock market: an analysis of daily returns data (Kiran Sharma, Pawan Kanaujia, Anindya S. Chakrabarti, Anirban Chakraborti) -- Chapter 12: The Divergence Rate of Share Price from Company Fundamentals: An Empirical Study at Regional Level (Michiko Miyano, Taisei Kaizoji) -- Chapter 13: Analyzing Relationships Among Financial Items of Banks' Balance Sheets (Kunika Fukuda, Aki-Hiro Sato).

Sommario/riassunto

This book focuses on how important massive information is and how sensitive outcomes are to information. In this century humans now are coming up against the massive utilization of information in various contexts. The advent of super intelligence is drastically accelerating the evolution of the socio-economic system. Our traditional analytic approach must therefore be radically reformed in order to adapt to an information-sensitive framework, which means giving up myopic purification and the elimination of all considerations of massive information. In this book, authors who have shared and exchanged their ideas over the last 20 years, offer thorough examinations of the theoretical–ontological basis of complex economic interaction, econophysics, and agent-based modeling during the last several decades. This book thus provides the indispensable philosophical–scientific foundations for this new approach, and then moves on to empirical–epistemological studies concerning changes in sentiments and other movements in financial markets.
