1. Record Nr. UNINA9910300420203321

Titolo	Econophysics and Data Driven Modelling of Market Dynamics / / edited by Frédéric Abergel, Hideaki Aoyama, Bikas K. Chakrabarti, Anirban Chakraborti, Asim Ghosh
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-08473-9
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (360 p.)
Collana	New Economic Windows, , 2039-411X
Disciplina	330.01519536
Soggetti	Sociophysics Econophysics Game theory Economic theory System theory Computational complexity Data-driven Science, Modeling and Theory Building Game Theory, Economics, Social and Behav. Sciences Economic Theory/Quantitative Economics/Mathematical Methods Complex Systems Complexity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	From the Contents: How to measure lead-lag relationships from high frequency data? -- Correlation and Interdependencies in coupled financial networks -- The Asian Economic Observatory Network (AEON) Proposal on Data-Driven Agent-Based Modeling of the Asian Economies.
Sommario/riassunto	This book presents the works and research findings of physicists, economists, mathematicians, statisticians, and financial engineers who have undertaken data-driven modelling of market dynamics and other empirical studies in the field of Econophysics. During recent decades, the financial market landscape has changed dramatically with the

deregulation of markets and the growing complexity of products. The ever-increasing speed and decreasing costs of computational power and networks have led to the emergence of huge databases. The availability of these data should permit the development of models that are better founded empirically, and econophysicists have accordingly been advocating that one should rely primarily on the empirical observations in order to construct models and validate them. The recent turmoil in financial markets and the 2008 crash appear to offer a strong rationale for new models and approaches. The Econophysics community accordingly has an important future role to play in market modelling. The Econophys-Kolkata VIII conference proceedings are devoted to the presentation of many such modelling efforts and address recent developments. A number of leading researchers from across the globe report on their recent work, comment on the latest issues, and review the contemporary literature.