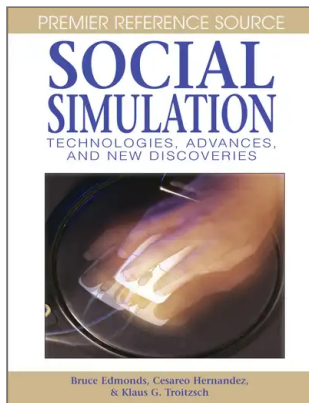


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Analyzing the Influences of Passive Investment Strategies on Financial Markets via Agent-Based Modeling

Hiroshi Takahashi (Okayama University, Japan), Satoru Takahashi (Mitsui Asset Trust and Banking, Japan), and Takao Terano (Tokyo Institute of Technology, Japan)

Source Title: [Social Simulation: Technologies, Advances and New Discoveries](#)

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Abstract

This chapter develops an agent-based model to analyze microscopic and macroscopic links between investor behaviors and price fluctuations in a financial market. This analysis focuses on the effects of Passive Investment Strategy in a financial market. From the extensive analyses, we have found that (1) Passive Investment Strategy is

have found that (1) Passive Investment Strategy is valid in a realistic efficient market, however, it could have bad influences such as instability of market and inadequate asset pricing deviations, and (2) under certain assumptions, Passive Investment Strategy and Active Investment Strategy could coexist in a Financial Market.

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Fairness, Commitment, and Inequality (pages 1-12)

István Back

Conditional cooperation is a prominent explanation of reciprocal cooperation in repeated exchange. However, empirical evidence for commitment behavior...

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Taxpayer Compliance Simulation: A Multi-Agent Based Approach (pages 13-25)

Kim M. Bloomquist

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This chapter describes the development of a prototype multi-agent based model – the Tax Compliance Simulator (TCS) – designed to help tax administrators think...

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David Chavalarias

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Guillaume Deffuant, Gérard Weisbuch

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Understanding Tag Systems by Comparing Tag Models (pages 68-80)

David Hales

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J. Gary Polhill, Dawn C. Parker, Nicholas M. Gotts

This chapter explores the effects of a more realistic agent-based land exchange mechanism on the relative competitive success of innovative and imitative...

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Introducing Social Issues into a Minority Game by Using an Agent Based Model (pages 98-114)

Marco Remondino, Alessandro Cappellini

In this chapter, the authors perturb a Minority Game (MG) with some sociological issues, first of all by implementing a social network among the involved...

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Gennaro Di Tosto

Evolutionary studies account for cooperation under the shadow of the future. But how can altruism spread without direct reciprocity? Learning from punishment...

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Andreas Ernst, Carsten Schulz, Nina Schwarz

This chapter presents the purpose, the basic concepts, the implementation, and a scenario run of the agent-based part of a large Decision Support System for...

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151-168)

Javier Gil-Quijano

In this chapter, we present a multi-agent system that models and simulates the dynamics of intra-urban mobility through the automated formation and evolution...

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The Role of Risk Aversion and Technical Trading in the Behaviour of Financial Markets

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José Antonio Pascual

In this paper we show how agent based social simulation helps us to improve some of the traditional models and theories in financial economics. In particular...

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Marta Posada

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Intergovernmental Negotiations: Peer Coordination in Intergovernmental Policy Networks (pages 192-206)

Nicole J. Saam, David Sumpter

Concession behavior is typically seen in bargaining processes, e.g. in intergovernmental negotiations. In traditional bargaining theory, especially

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Regional Policy Hints from Heterogeneous Agents Simulation

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M. Salzano

Following the traditional approach to decision theory there is a strong difficulty to obtain policy hints for complex systems. Vice versa, the study of...

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Hiroshi Takahashi, Satoru Takahashi, Takao Terano

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Robert Tobias

In a collective action, people act together with the intention of producing public goods. Public, or collective, goods are states or objects that benefit the...

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Piergiuseppe Morone, Richard Taylor

This chapter introduces a formal model of

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a complex knowledge integration process named 'thinking along'. Here the firm is modelled as a working environment...

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Juliette Rouchier, Stephane Robin

This paper describes a multi-agent model of double-auction market in which simulations are led. In our study of market we focus on information processing and...

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Richard Taylor

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