Kazuo Nishimura · Alain Venditti Nicholas C. Yannelis Editors

## Sunspots and Non-Linear Dynamics

Essays in Honor of Jean-Michel Grandmont



## **Contents**

1	Kazuo Nishimura, Alain Venditti and Nicholas C. Yannelis	1
Part	t I Self-Fulfilling Expectations and Sunspots	
2	Assessing the Local Stability Properties of Discrete Three-Dimensional Dynamical Systems: A Geometrical Approach with Triangles and Planes and an Application with Some Cones  Jean-Paul Barinci and Jean-Pierre Drugeon	15
3	From Sunspots to Black Holes: Singular Dynamics in Macroeconomic Models	41
4	Sunspot Fluctuations in Two-Sector Models with Variable Income Effects Frédéric Dufourt, Kazuo Nishimura, Carine Nourry and Alain Venditti	71
5	From Self-Fulfilling Mistakes to Behavioral Learning Equilibria	97
6	Regime-Switching Sunspot Equilibria in a One-Sector Growth Model with Aggregate Decreasing Returns and Small Externalities	125
7	Equilibrium Dynamics in a Two-Sector OLG Model with Liquidity Constraint	147

8	Homoclinic Orbit and Stationary Sunspot Equilibrium in a Three-Dimensional Continuous-Time Model with a Predetermined Variable	175	
Part II Bubbles and Stabilizing Policy			
9	Rational Land and Housing Bubbles in Infinite-Horizon  Economies	203	
10	The Stabilizing Virtues of Monetary Policy on Endogenous Bubble Fluctuations	231	
11	Can Consumption Taxes Stabilize the Economy in the Presence of Consumption Externalities?	259	
Part III Growth			
12	Uncertainty and Sentiment-Driven Equilibria  Jess Benhabib, Pengfei Wang and Yi Wen	281	
13	Technological Progress, Employment and the Lifetime of Capital	305	
14	Nonbalanced Growth in a Neoclassical Two-Sector Optimal Growth Model	339	
Part IV General Equilibrium			
15	An Argument for Positive Nominal Interest	363	
16	Winners and Losers from Price-Level Volatility: Money Taxation and Information Frictions Guido Cozzi, Aditya Goenka, Minwook Kang and Karl Shell	387	
17	A Note on Information, Trade and Common Knowledge Leonidas C. Koutsougeras and Nicholas C. Yannelis	403	