Curriculum Vitae October 27, 2025

Tadashi Shigoka

Year of Birth: 1963

Education

- Ph. D in Economics, Yale University, 1993
 Advisers: Truman Bewley, Jean-Michel Grandmont, and Koichi Hamada
- Bachelor of Economics, University of Tokyo, 1985

Field of Interest

- Endogenous Business Cycle Theory
- Optimal Growth Theory
- Endogenous Growth Theory

Employment

- Professor, Institute of Economic Research, Kyoto University, 2003-
- Assistant Professor, Institute of Economic Research, Kyoto University, 1993-2003
- Assistant, Faculty of Economics, University of Tokyo, 1992-1993

Professional Activities

- Visiting Lecturer (the 1990's): Nagoya City University, Osaka University, and Tohoku University
- Conference Presentations:
 - Tadashi Shigoka (with Kazuo Nishimura and Makoto Yano), "Endogenous Growth Models with International Trade and Chaos with Large Degrees of Freedom", presented at the International Conference on Difference Equations and Applications held at Kyoto University, Kyoto in July 2006
 - 2. Tadashi Shigoka (with Jess Benhabib and Kazuo Nishimura), "Bifurcation and Sunspots in the Continuous Time Equilibrium Model with Capacity Utilization", presented at the 3rd International Conference on Economic Theory "Social Welfare, Market Equilibrium and Stability" held at Miyako Hotel Tokyo, Tokyo in March 2006

- Tadashi Shigoka (with Kazuo Nishimura and Makoto Yano), "Sunspots and Hopf Bifurcations in Continuous Time Endogenous Growth Models", presented at Intertemporal Equilibria, Aggregations and Sunspots: in Honor of Jean-Michel Grandmont, held at Portuguese Catholic University, Lisbon in October 2005
- 4. Tadashi Shigoka (with Kenji Miyazaki and Mitsuru Nakagawa), "An Endogenous Growth Model and Nonstationary Sunspot Equilibria with Cointegration", presented at International Conference: Dynamic Equilibria, Expectations and Indeterminacy, held at University of Paris 1-Pantheon-Sorbonne, Paris in June 1999
- 5. Tadashi Shigoka, "On the Nonstationary Sunspot Equilibria Generated by an Unbounded Growth Model", presented at the Technical Symposium on "Recent Developments in Growth Economics" at the Center for Japan-U.S. Business and Economic Studies, New York in April 1995
- 6. Tadashi Shigoka, "A Note on Woodford's Conjecture: Constructing Stationary Sunspot Equilibria in a Continuous Time Model", presented at International Conference on Endogenous Growth and Nonlinear Economic Dynamics, held at Meiji Gakuin University, Tokyo, Japan in November 1993
- Book Review: Tadashi Shigoka, "Shin-ichi Fukuda, Macroeconomics of Price Volatility", The Economic Review, 49, pp. 91-92, January 1998 (in Japanese)
- Other: Referee for Journal of Economic Dynamics and Control, Journal of Economic Theory, Journal of Macroeconomics, Japanese Economic Review, International Journal of Economic Theory, Economic Modeling, Journal of Infrastructure, Policy and Development.

Research Articles

- Refereed Articles:
 - 1. Tadashi Shigoka (with Shintaro Asaoka, Kazuo Nishimura, and Makoto Yano), "On the optimal non-autonomous limit cycle in the CO2 emissions control problem with smooth seasonal fluctuations", **Communications in Optimization Theory** 2025 (2025) Article ID. 46 pp. 1-18, 2025.
 - 2. Tadashi Shigoka (with Domitry Gromov and Anton Bondarev), "Optimality and Sustainability of Hybrid Limit Cycles in the Pollution Control Problem with Regime Shifts", **Environment, Development and Sustainability** 26 (4) pp. 10701-10718, 2024.
 - 3. Tadashi Shigoka (with Kazuo Nishimura), "Hopf Bifurcation and the

- Existence and Stability of Closed Orbits in Three-Sector Models of Optimal Endogenous Growth," **Studies in Nonlinear Dynamics & Econometrics**, De Gruyter, vol. 23 (4), pp. 1-21, September 2019.
- 4. Tadashi Shigoka (with Hiromi Murakami and Kazuo Nishimura), "Homoclinic Orbit and Stationary Sunspot Equilibrium in a Three-Dimensional Continuous-Time Model with a Predetermined Variable," Sunspots and Non-Linear Dynamics: Essays in Honor of Jean-Michel Grandmont, Studies in Economic Theory, Springer, (Kazuo Nishimura, Alain Venditti and Nicholas C. Yannelis, eds.), pp. 175-200, 2016.
- 5. Tadashi Shigoka (with Kazuo Nishimura), "An Alternative Proof of the Theorem of Woodford on the Existence of a Sunspot Equilibrium in a Continuous-Time Model," Essays in Economic Dynamics: Theory, Simulation Analysis, and Methodological Study, Springer, (Akio Matsumoto, Ferenc Szidarovszky and Toichiro Asada, eds.), pp. 23-32, 2016.
- 6. Tadashi Shigoka (with Paolo Mattana and Kazuo Nishimura), "Homoclinic Bifurcation and Global Indeterminacy of Equilibrium in a Two-Sector Endogenous Growth Model", **International Journal of Economic Theory** 5, pp, 25–47, 2009.
- 7. Tadashi Shigoka (with Jess Benhabib and Kazuo Nishimura), "Bifurcation and Sunspots in the Continuous Time Equilibrium Model with Capacity Utilization", **International Journal of Economic Theory** 4, pp. 337-355, 2008.
- 8. Tadashi Shigoka (with Kazuo Nishimura), "Sunspots and Hopf Bifurcations in Continuous Time Endogenous Growth Models", **International Journal of Economic Theory** 2, pp.199-216, 2006.
- 9. Tadashi Shigoka (with Michele Boldrin, Kazuo Nishimura and Makoto Yano), "Chaotic Equilibrium Dynamics in Endogenous Growth Models", **Journal of Economic Theory** 96, pp. 97-132, 2001.
- Tadashi Shigoka (with Kazuo Nishimura and Makoto Yano), "Interior Optimal Chaos with Arbitrarily Low Discount Rates", Japanese Economic Review 49, pp. 223-233, 1998.
- 11. Tadashi Shigoka, "On the Nonstationary Sunspot Equilibria Generated by an Unbounded Growth Model", **Japan and the World Economy** 9, pp. 261-277, 1997.
- 12. Tadashi Shigoka, "A Note on Woodford's Conjecture: Constructing Stationary Sunspot Equilibria in a Continuous Time Model", **Journal of Economic**

Theory, 64, pp. 531-540, 1994.

Other Published Articles:

- 1. Tadashi Shigoka (with Luis Bettencourt and Kazuo Nishimura), "Hopf bifurcation and the existence and stability of closed orbits in three-sector models of optimal endogenous growth", **Raising Market Quality, Integrated Design of "Market Infrastructure"** 2008-2013, pp.207-235, 2013.
- 2. Tadashi Shigoka (with Jess Benhabib and Kazuo Nishimura) "Homoclinic Bifurcation in the Continuous Time Growth Model with Capacity Utilization and External Effects", **Institute of Mathematical Analysis, Lecture Note Series** 1391, pp. 135-146, August 2004.
- 3. Tadashi Shigoka (with Michele Boldrin, Kazuo Nishimura and Makoto Yano), "On the Chaotic Dynamics Generated by an Endogenous Growth Model", New Researches in Dynamical Systems, **Institute of Mathematical Analysis, Lecture Note Series** 1179, pp. 45-59, December 2000.
- 4. Tadashi Shigoka, "On the Stationary Sunspot Equilibria in a Continuous Time Model with a Predetermined Variable and an Unstable Root", **Institute of Mathematical Analysis, Lecture Note Series** 987, pp. 6-21, April 1997.
- Tadashi Shigoka, (with Kazuo Nishimura, Makoto Yano and Keiichiro Iwai),
 "Topological Optimal Chaos", Institute of Mathematical Analysis, Lecture
 Note Series 987, pp. 84-106, April 1997.