

CURRICULUM VITAE

Ted Loch-Temzelides

October 2023

Contact Information:

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Appointments:

George and Cynthia Mitchell Professor in Sustainable Development, Department of Economics, Rice University, 2019 - present

Baker Institute Rice Scholar, Center for Energy Studies, James A. Baker III Institute for Public Policy, Rice University, 2010 - present

Professor, Department of Economics, Rice University, 2008 - 2019

Professor, Department of Economics, University of Pittsburgh, 2008

Associate Professor, Department of Economics, University of Pittsburgh, 2002 - 2007

Assistant Professor, Department of Economics, Henry B. Tippie College of Business, University of Iowa, 1997 - 2002 (awarded tenure in 2002)

Economist, Federal Reserve Bank of Philadelphia, 1995 – 1997

Other Appointments:

Visiting Research Scholar, Center for Health and Wellbeing, Princeton School of Public and International Affairs - Spring 2024

Senior Fellow, CUT, Rennes School of Business, France, 2022 - present

Consultant, World Bank, 2021-22, 2023

Visiting Researcher, IMERA, Aix Marseille Universite, Spring 2019

Visiting Researcher, Institute of the Environment and Sustainability, UCLA, Spring 2017

Visiting Scholar, Center for Energy and Environmental Policy Research, Massachusetts Institute of Technology, Fall 2016

Visiting Scholar, IMF, during January 2017, August 2016, December 2015, September 2012

Visiting Professor, European University Institute, May - June 2012

Visiting Researcher, Banco de Portugal, June - July 2011

Visiting Professor, CES, Ludwig-Maximilians-Universitaet, Munich, June - July 2009

Visiting Associate Professor of Finance, The Wharton School, University of Pennsylvania, 2006 - 2007

Visiting Scholar, Department of Managerial Economics and Decision Sciences, Kellogg School of Management, Northwestern University, Fall 2000

Research Department Visitor, European Central Bank, October 2008, June 2007, June 2006, May - August 2005, June - August 2004

Research Department Visitor, Federal Reserve Bank of Minneapolis, June 1996, May - August 1995

Education:

Ph.D. (Economics), University of Minnesota, 1995

M.S. (Mathematics), University of Minnesota

B.A. (Economic Sciences), with honors, School of Industrial Studies, University of Piraeus, Greece

Languages:

Greek, some French and Italian

Sample Recognitions and Awards:

1. Commissioner, *Lancet* Preventing Pandemics at the Source Commission on Prevention of Viral Spillover, 2023-25
2. Reducing the Risk of Pandemics through Primary Prevention, *Creative Ventures Fund Grant*, Rice University, 2023
3. International Affairs Fellowship in International Economics, *Council on Foreign Relations*, 2020-21
4. The Environmental Impacts of COVID-19 in Texas: Understanding Trade-Offs of Plausible Low-Carbon Futures, with Sylvia Dee (Earth, Environmental & Planetary Sciences), Carrie Masiello (Earth, Environmental & Planetary Sciences), and Mark Torres (Earth, Environmental & Planetary Sciences); *Rice COVID-19 Research Fund Grant*, Rice University, 2020
5. Resilience of Industrial and Energy Infrastructure, with Philip Bedient (Civil and Environmental Engineering), Pedram Hassanzadeh (Mechanical Engineering), Rachel Meidl (Baker Institute for Public Policy), and Jamie Padgett (Civil and Environmental Engineering); *Rice Energy and Environment Initiative (E2I) Seed Grant*, Rice University, 2018
6. Economic and Environmental Assessment with the Rice World Energy Model, with Daniel S. Cohan (Civil and Environmental Engineering); *Rice Energy and Environment Initiative (E2I) Seed Grant*, Rice University, 2014
7. Research Professorship Award, *SSRI*, Rice University, 2013
8. *Banco de Portugal Grant*, 2011

9. *National Science Foundation Grant #0517862, Mechanism Design and Payment System Analysis*), 2005-2008
10. Henry B. Tippie Research Fellowship, *University of Iowa*, 2001
11. Old Gold Summer Fellowship, *University of Iowa*, 1998, 2000
12. Collegiate Teaching Award, *Henry B. Tippie College of Business, University of Iowa*, 1999

Research:

I. Climate and Energy Policy, Sustainability and Growth:

1. “Electricity grids and geopolitical coercion: a game theoretic analysis of the synchronization of the Baltic States’ networks with continental Europe,” with Songying Fang, Amy Jaffe, and Chiara Lo Prete, manuscript (2023)
2. “The Optimal Design of International Climate Policy,” with Raouf Boucekkine, Giorgio Fabbri, and Fausto Gozzi, manuscript (2023)
3. “Pollution and Labor Productivity: Evidence from Chilean Cities,” with Hasan Dudu, Charl Jooste, and James Robert Sampi Bravo, Policy Research working paper no. **WPS 10236**, *World Bank Group*, <http://documents.worldbank.org/curated/en/099812111182231939/IDU0251d91b00d0ca04c220a7a904e8be83b193d> (2023)
4. “Renewable Technology Adoption Costs and Economic Growth,” with Bernardino Adao and Borghan Narajabad, Finance and Economics Discussion Series **2022-045**. *Washington: Board of Governors of the Federal Reserve System*, <https://doi.org/10.17016/FEDS.2022.045>, under revision, *Energy Economics* (2023)
5. “Mercantilism’s Groundhog Day: A Trade War, the Trump Administration and Northeast Asia,” with Ken Medlock and Wootung Chae, *Energy Strategy Reviews*, **38 100741** (2021)
6. “A Cost-Benefit Analysis of the Jones Act: The Case of Product Tankers,” with Igor Hernandez, Ken Medlock, and Anna Mikulska, *Journal of Transport Economics and Policy* **55(1)**, pp. 65-84(20) (2021)

7. “Hurricane Surge Risk Assessment of Petroleum Infrastructure under Changing Climate Conditions,” with Majid Ebad Sichani, Katherine A. Anarde, Kendall Capshaw, Pedram Hassanzadeh, Rachel A. Meidl , Jamie E. Padgett, and Philip B. Bedient, *Frontiers in Built Environment: Wind Engineering and Science* <https://doi.org/10.3389/fbuil.2020.00104> (2020)
8. “Needed: Robustness in Climate Economics,” Chapter Six in: *Coping with the Climate Crisis: Mitigation Policies and Global Coordination*, R. Arezki, P. Bolton, K. El Aynaoui, and M. Obstfeld, Eds., *Columbia University Press* (2018)
9. “Employment Impacts of Upstream Oil and Gas Investment in the United States,” with Mark Agerton, Peter Hartley, and Kenneth B. Medlock III, *International Monetary Fund WP/15/28* (2015), *Energy Economics* **62** (2017)
10. “Robust Dynamic Energy Use and Climate Change,” with Xin Li and Borghan Narajabad, *Quantitative Economics* **7** (2016)
11. “Monetary Emissions Trading Mechanisms,” with Cyril Monnet, *International Journal of Economic Theory* **12(1)** (2016)
12. “Energy Sector Innovation and Growth,” with Peter Hartley, Kenneth B. Medlock III, and Xinya Zhang, *The Energy Journal* **37(1)** (2016)
13. “Local Employment Impact from Competing Energy Sources: Shale Gas versus Wind Generation in Texas,” with Peter Hartley, Kenneth B. Medlock III, and Xinya Zhang, *Energy Economics* **49** (2015)
14. “New Alignments? The Geopolitics of Gas and Oil Cartels and the Changing Middle East,” with Songying Fang and Amy Jaffe, *Economics of Energy and Environmental Policy* **3 (1)** (2014)

II. Global Health Policy and the Economy:

15. “A new generation of hybrid models to quantify the impact of and response to emerging pathogens,” with Jerome Adda, Raouf Boucekkine, Andrew P. Dobson, Giorgio Fabbri, Fausto Gozzi, Mercedes Pascual, Cristiano Ricci, and Josselin Thuilliez, in progress (2023)

16. “Balancing Economic and Epidemiological Interventions in the Early Stages of Pathogen Emergence,” with Raouf Boucekkine, Giorgio Fabbri, Fausto Gozzi, Andrew P. Dobson, Mercedes Pascual, and Cristiano Ricci, *Science Advances* **Vol. 9 (21)**, DOI: 10.1126/sciadv.ade6169 (2023)
17. “The Costs and Benefits of Primary Prevention of Zoonotic Pandemics,” with Aaron Bernstein, Amy W. Ando, Mariana M. Vale, Binbin V. Li, Hongying Li, Jonah Busch, Colin Chapman, Margaret Kinnaird, Katarzyna Nowak, Marcia C. Castro, Carlos Zambrana-Torrel, Jorge A. Ahumada, Lingyun Xiao, Les Kaufman, Lee Hannah, Peter Daszak, Stuart L. Pimm, and Andrew P. Dobson, *Science Advances* **Vol. 8 (5)**, DOI: 10.1126/sciadv.abl4183 (2022)
18. “Race, Local Pollution, and COVID-19 Deaths in Texas,” with A. Xu, C. Adiole, N. Botton, S. Dee, C. Masiello, M. Torres, and members of the Rice COVID-19 environmental project, *Scientific Reports* **12:1002** (2022)
19. “COVID-19 and the Value of Safe Transport,” with Ken Medlock and Elsie Hung, *Scientific Reports*, **11:21707** (2021)
20. “Ecology and Economics for Pandemic Prevention,” with Andrew P. Dobson, Stuart Pimm, Lee Hannah, Les Kauffman, Jorge A. Ahumada, Amy W. Ando, Aaron Bernstein, Jonah Busch, Peter Daszak, Jens Engelman, Margaret Kinnaird, Binbin Li, Thomas Lovejoy, Katarzyna Nowak, Patrick R. Roehrdanz, and Mariana M. Vale, *Science* **24 Vol. 369**, Issue **6502**, pp. 379-381, DOI: 10.1126/science.abc3189 (2020)

III. Economic Theory and Experiments, Ecology and Economics:

21. “On Fixed Points of Locally and Pointwise Contractive Set-Valued Maps with an Application to the Existence of Nash Equilibrium in Games,” *Journal of Fixed Point Theory and Applications* **24:80** (2022)
22. “Walrasian Equilibrium in Nature,” *Proceedings of the National Academy of Sciences* **118 (27) e2020961118**, <https://doi.org/10.1073/pnas.2020961118> (2021)
23. “Conservation, Risk Aversion, and Livestock Insurance: the Case of the Snow Leopard,” *Conservation Letters* **e12793**, <https://doi.org/10.1111/conl.12793> (2021)

24. “A Double-Slit Experiment with Human Subjects,” with John Duffy, *PLOS ONE* **16(2)**: e0246526, <https://doi.org/10.1371/journal.pone.0246526> (2021)
25. “Money Talks,” with Marie Hoerova and Cyril Monnet, *Economics Letters* **116** (2012)
26. “Optimal Clearing Arrangements for Financial Trades,” with Thorsten Koepl and Cyril Monnet, *Journal of Financial Economics* **103** (2012)
27. “Competitive Behavior in Market Games: Evidence and Theory,” with John Duffy and Alexander Matros, *Journal of Economic Theory* **146 (4)** (2011)
28. “Modeling the Experimental Process in the Social Sciences,” *Journal of Mathematical Economics* **46 (4)** (2010)
29. “Self-Organized Criticality in a Dynamic Entry Game,” with Andreas Blume and John Duffy, *Journal of Economic Dynamics and Control*, **34** (2010)
30. “Fashion Statement,” *Review of Economic Dynamics* **12 (4)** (2009)
31. “A Dynamic Model of Settlement,” with Thorsten Koepl and Cyril Monnet, *Journal of Economic Theory* **142 (1)** (2008)
32. “Banking, Liquidity, and the Velocity of Money,” with Ricardo Cavalcanti and Andres Erosa, *International Economic Review*, **46 (2)** (2005)
33. “A Model of Bureaucracy and Corruption,” with Shouyong Shi, *International Economic Review* **45 (3)** (2004)
34. “Lack-of-Recall and Centralized Monetary Trade,” with Jialin Yu, *International Economic Review*, **45 (4)** (2004)
35. “On the Local Interaction of Money and Credit,” with Yi Jin, *Review of Economic Dynamics*, **7** (2004)
36. “Directed Matching and Monetary Exchange,” with Dean Corbae and Randall Wright, *Econometrica* **71 (3)** (2003)
37. “On the Geography of Conventions,” with Andreas Blume, *Economic Theory* **22 (4)** (2003)

38. “Matching and Money,” with Dean Corbae and Randall Wright, *American Economic Review Papers and Proceedings* **92 (2)** (2002)
39. “Discrete Time Dynamics in a Random Matching Monetary Model,” with Hector Lomeli, *Economic Theory* **20 (2)** (2002)
40. “Private Money, Settlement, and Discounts,” with Steve Williamson, *Carnegie-Rochester Conference Series on Public Policy* **54** (2001)
41. “Payments Systems Design in Deterministic and Private Information Environments,” with Steve Williamson, *Journal of Economic Theory* **99 (1/2)** (2001)
42. “Private Money and Reserve Management in a Random Matching Model,” with Ricardo Cavalcanti and Andres Erosa, *Journal of Political Economy* **107 (5)** (1999)
43. “Sequential Equilibrium and Competition in a Diamond-Dybvig Model,” with Bernardino Adao, *Review of Economic Dynamics* **1** (1998)
44. “Evolution, Coordination, and Banking Panics,” *Journal of Monetary Economics* **40** (1997)

IV. Other Publications:

45. “The future of ESG: the past may not be the best guide,” Policy Brief, Rice University’s Baker Institute for Public Policy (2024)
46. “Introduction to the Special Issue on Mathematical Economic Epidemiology Models,” with Raouf Boucekkine, *Economic Theory* (2024)
47. “Working from Home? Commuting Beyond COVID-19,” with Kenneth B. Medlock III and Shih Yu (Elsie) Hung, *Public Health Post* (2022)
48. “Pandemics, the Economy, Nature, and the Energy Sector,” Policy Brief, *Recommendations for the Biden Administration*, Rice University’s Baker Institute for Public Policy (2021)

49. “Keeping Up With The Jones Act. Changes A Pandemic And Price War Could Bring,” with Igor Hernández, Ken Medlock, Michelle Foss, and Anna Mikulska, *Forbes.com* (2020)
50. “California’s Solar Rooftop Mandate Doesn’t Make Economic Sense,” with Lee Ohanian, *San Francisco Chronicle* (2018)
51. “Needed: A Cost-Benefit Analysis of the Jones Act,” *Cato Online Forum* (2018)
52. “My Kingdom for a Renewable Energy Source,” with Lee Ohanian, *The Wall Street Journal* (2017)
53. “The Jones Act: Friend of Foe?,” *Forbes.com* (2017)
54. “Paris, the Environment, and Economic Growth,” *Forbes.com* (2015)
55. “What’s next for Greece?” *Forbes.com* (2015)
56. “Let the Greek Games End,” *Forbes.com* (2015)
57. “Kurdish Oil and U.S. Leverage in Iraq,” with Jim Krane, *Forbes.com* (2014)
58. “Money Talks: Information and Monetary Policy,” with Marie Hoerova and Cyril Monnet. *Yale Economic Review* (2010)
59. Review of “The Theory of Money and Financial Institutions,” Volumes I and II, by Martin Shubik, *Journal of Economic Literature* **XXXIX** (4) (2001)
60. “Are Bank Runs Contagious?” *Federal Reserve Bank of Philadelphia Business Review* (1997)

Sample Professional Activities:

Fellowships: *Pan-African Scientific Research Council, CESifo Research Network-Munich*

Sample Keynote Presentations:

Rennes School of Business Leading Sustainability Transformations Summit, 2023

World Pandemic Research Network Conference, 2022
3rd Vietnam Symposium on Leadership and Public Policy, 2021
Public Policy for a Green Transition Panel Speaker, EconPol Europe Annual Conference, 2021
Vietnam Sustainability Conference, 2019

Editorial Boards:

Associate Editor: *Economic Theory*, *Economic Theory Bulletin*, *Journal of Climate Finance*, *PLOS ONE*

Guest Editor (with Raouf Boucekkine): *Economic Theory* Special Issue on Mathematical Economic Epidemiology Models

Refereeing: *American Economic Review*, *Applied Economics Letters*, *Austrian Science Fund (FWF)*, *B.E. Journals in Macroeconomics*, *Econometrica*, *Economic Journal*, *Economic Theory*, *Economic Theory Bulletin*, *The Energy Journal*, *Energy Strategy Reviews*, *European Economic Review*, *Games and Economic Behavior*, *International Economic Review*, *International Journal of Game Theory*, *Journal of Economic Behavior and Organization*, *Journal of Economic Dynamics and Control*, *Journal of Economic Theory*, *Journal of Environmental Economics and Management*, *Journal of Monetary Economics*, *Journal of Money, Credit, and Banking*, *Journal of Optimization Theory and Applications*, *Journal of Political Economy*, *Journal of Public Economic Theory*, *Macroeconomic Dynamics*, *Management Science*, *mSystems*, *National Science Foundation*, *Nature Communications*, *Review of Economic Dynamics*, *Research Grants Council of Hong Kong*, *Review of Economic Studies*, *The Scandinavian Journal of Economics*, *Social Sciences and Humanities Research Council of Canada*

Current and Past Memberships: *Agricultural & Applied Economics Association*, *American Economic Association*, *American Finance Association*, *American Mathematical Society*, *Association of Environmental and Resource Economists*, *Econometric Society*, *Euro Area Business Cycle Network*, *International Association for Energy Economics*, *National Association for Business Economics*, *Royal Economic Society*, *Society for the Advancement of Economic Theory*, *United States Association for Energy Economics-Houston Chapter*

Other:

Frontiers of Modeling in Economic Epidemiology Conference, co-organizer (with Raouf Boucekkine, Paris, France, October 2023
Vietnam Symposium in Climate Transition, Scientific Committee Advisor, 2023

11th International Research Meeting in Business and Management (IRMBAM)
Conference Co-Chair, July 2022, 2023
Joint American Economic Association/International Association for Energy Economics Panel Session Organizer and Chair, *ASSA Winter Meetings* 2018, 2019, 2020, 2021, 2022, 2023
Session Organizer, *SAET Conference*, 2009, 2011, 2013, 2017, 2019, 2023
Program Organizing Committee, *Hydrocarbon Economics and Evaluation Symposium* (Houston, Texas), May 2016
Organizing Committee, 8th *SAET Conference*, 2007

Sample Service (Academic):

Junior Faculty Mentor, Economics Department, Rice University, 2022 – present

Senior Recruitment Committee Chair, Economics Department, Rice University, 2021 - 2022

Agricultural & Applied Economics Association Mentoring Matchup Program (Serving as Mentor to Three Junior Faculty), 2020 - present

Environmental Initiative Task Force Committee (developed a proposal for the creation of an Environmental Institute at Rice University), 2019 - 2020

PhD Student Placement Director, Department of Economics, Rice University, 2019-2022

Co-organizer (with Kerry Back), Business and Economics Workshop, jointly run between the Jesse H. Jones Graduate School of Business and the Economics Department, Rice University, 2015 - 2020

Martel College Magister, Rice University, managed a college consisting of over three hundred undergraduate students and five staff members. Raised funds and finalized the creation of the Martel College Endowment, 2010 – 2016

Committee on Undergraduate Curriculum, Rice University, 2017 - 2020

Social Sciences Faculty Advisory Committee, Rice University, 2015 - 2016

Masters of Energy Economics Organizing and Admission Committees, Rice University, 2015 - 2020

Masters of Global Affairs Founding Committee, Rice University, 2014 - 2015
(created a Global Affairs Masters degree at Rice University)

Athletics Committee, Rice University, 2012 - 2015

Economics Department External Chair Search Committee, Rice University, 2013

Promotion and Tenure Committee, Rice University, 2009 – 2010

Sample Service (non-Academic):

Member, Houston Philosophical Society, 2022

Board of Directors, *French-American Chamber of Commerce* - Houston Chapter,
2012 - 2016 (Vice-President, 2015 - 2016)

Sample Classes Taught:

Game Theory (PhD, advanced)

Microeconomics (PhD, 1st year)

Macroeconomics (PhD, 1st year)

Mathematics for Economists (PhD, 1st year)

Transportation Economics (Masters in Energy Economics)

International Macroeconomics (Masters in Global Affairs)

The Economics of Sustainability, Conservation, and Pandemics (Undergraduate,
advanced)

Financial Engineering (Undergraduate, advanced)

Mathematical Economics (Undergraduate, advanced)

Microeconomics (Undergraduate, intermediate)

Macroeconomics (Undergraduate, intermediate)

Microeconomics (Undergraduate, principles)

PhD Thesis Committees:

1. An Nguyen, Universite Paris-Saclay, in progress
2. Ali Campbell, Ecology and Evolutionary Biology, Rice University, in progress
3. Kevin Genna, Aix-Marseille School of Economics, 2021, first position:
Católica Lisbon School of Business & Economics, Portugal
4. Hanyi Livia Yi, Rice University, 2021, first position: *Boston College*,
Finance Department

5. Yessenia Tellez, Rice University, 2021, first position: *Virginia Tech, Finance Department*
6. Amoray Riggs-Cragun, Rice University, 2019, first position: *University of Chicago, Marketing Department*
7. Justin Balthrop, Rice University, 2019, first position: *University of Kansas, Finance Department*
8. Ron Liu, Rice University, 2018, first position: *University of Nebraska, Lincoln, Finance Department*
9. Morad Zekhnini, Rice University, 2016, first position: *Tulane University, Finance Department*
10. Xin Li (co-advisor), Rice University, 2014, first position: *International Monetary Fund*
11. Xinya Zhang, Rice University, 2013, first position: *University of Texas, Bureau of Economic Geology*
12. Islam Rizvanoglu (advisor), Rice University, 2012, first position: *Zirve University, Turkey*
13. Jin Cao (co-advisor), Ludwig-Maximilians-Universitaet, Munich, 2010, first position: *Norges Bank, Norway*
14. Amelie Carlton, University of Houston, 2010, first position: *University of Houston*
15. Ahmadreza Shahidi-Azizabadi (co-advisor), University of Pittsburgh, 2009, first position: *PMU, Saudi Arabia*
16. Yang Zhao (co-advisor), University of Pittsburgh, 2007, first position: *Xiamen University, China*
17. Yong-Ju Lee, University of Pittsburgh, 2007, first position: *Samsung Research Institute of Finance, Korea*
18. Virginie Masson, University of Pittsburgh, 2007, first position: *The University of Adelaide, Australia*
19. Xin He, University of Pittsburgh, 2006, first position: *Central University of Economics and Finance, Beijing, China*
20. Hikmet Gunay (co-advisor), University of Iowa, 2003, first position: *Concordia University, Canada*
21. Troy Tassier, University of Iowa, 2002, first position: *University of Michigan*
22. Sudeep Gosh, University of Iowa, 2001, first position: *Colgate University*
23. Ahmet Akyol, University of Iowa, 2001, first position: *York University, Canada*
24. Yi Jin, University of Iowa, 2001, first position: *University of Kansas*
25. Kartik Athreya, University of Iowa, 2000, first position: *Federal Reserve Bank of Richmond*

26. Craig Whittinghill, University of Iowa, 1999, first position: *Southern Illinois University*

Selected Undergraduate Senior Research Advising:

1. Lyon Anderson (Rice University), first position: *Epic Systems*
2. Fengyi Kong (Rice University), first position: Grad. School, *Columbia University*
3. Fahad Punjwani (Rice University), first position: *Deloitte Consulting*
4. Mark Cheng (Rice University), first position: *Belvedere Trading*
5. Bruno Rosa (Rice University), first position: *GP Investments*
6. Steffi Russell Egbert (Rice University), first position: *JP Morgan*
7. Viren Daniel Desai (Rice University), first position: *UBS*