John D. Sterman

Jay W. Forrester Professor of Management
Professor, MIT Institute for Data, Systems and Society
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Field Environmental sustainability; climate change policy; system dynamics; dynamics of organizational change, process improvement and project management; computer simulation of complex systems; experimental studies of decision making.

Education Ph.D., MIT Sloan School of Management, 1982.
A.B., Dartmouth College, 1977. Phi Beta Kappa, Summa cum Laude

Selected Professional Experience

2012 -	Co-founder and Faculty Director, MIT Sloan Sustainability Initiative
2002 -	Jay W. Forrester Professor of Management, Sloan School of Management, MIT
2015 -	Professor, Institute for Data, Systems and Society, MIT (by courtesy)
2004 - 2015	Professor of Engineering Systems, MIT (by courtesy)
1996 - 2002	J. Spencer Standish Professor of Management, Sloan School of Management, MIT
1989 -	Director, System Dynamics Group, Massachusetts Institute of Technology
1994 - 1996	Professor of Management Science, Sloan School of Management, MIT
1987 - 1993	Associate Professor, Sloan School of Management, MIT
1981 - 1986	Assistant Professor, Sloan School of Management, MIT
1984	Visiting Scientist, International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria
1979	Visiting scientist, Gruppen for Ressursstudier (Resource Policy Group), Oslo, Norway.
1978	US Department of Energy. Developed models and policy analysis for National Energy Plan II.
1977	IIASA, Laxenburg, Austria. Visiting scientist.

Awards and Honors

2023 Best Application Award, System Dynamics Society, for ReThink Health, https://rethinkhealth.org (with the RTH team)

2018 Elected Fellow of the American Association for the Advancement of Science (AAAS)

2018 Outstanding Service Award, System Dynamics Society

2017 Best Paper (People's Choice Award), 2017 ARCS (Alliance for Research on Corporate Sustainability) conference.

2016 Samuel E. Seegal Faculty Prize, given to a professor who "inspires students in pursuing and achieving excellence."

2014 Best Reviewer Award, Academy of Management *Discoveries*

2013 Best Application Award, System Dynamics Society, for Sterman et al., 2012 Climate Interactive: The C-ROADS Climate Policy Model. *System Dynamics Review*. 28(3): 295-305

2012 Honorary Doctorate, *Dottore Honoris Causa*, awarded by L'Universitá della Svizzera Italiana.

2012 Michael J. Crouch Visiting Prof. and Distinguished Lecturer, Australian Graduate School of Management.

2009 Jamieson Award for Excellence in Teaching, MIT Sloan School of Management

2007 Teacher of the Year, MIT Technology and Policy Program

2002, 1997, 1993, 1990, 1989 Awards for Excellence in Teaching, Sloan School of Management, MIT

2005 IBM faculty award

2002 Jay W. Forrester Award, given by the System Dynamics Society for the best published work in the field over the previous 5 years, for *Business Dynamics: Systems Thinking and Modeling for a Complex World.*

2001 Accenture Award, for best paper published in *California Management Review* (with Nelson Repenning, for "Nobody Ever Gets Credit for Fixing Problems That Never Happened" (Vol. 43, n. 4).

2001. Named one of the Sloan School's Outstanding Faculty, 2001 *Business Week Guide to the Best Business Schools.*

1988 Jay W. Forrester Award for "Modeling Managerial Behavior: Misperceptions of Feedback in a Dynamic Decision Making Experiment." *Management Science.* 35(3), 321-339.

Recent Courses Taught at MIT

1. 15.915 Business Strategies for a Sustainable Future (MBA elective)
2. 15.913, Strategies for Sustainable Business
3. 12.387/15.874/IDS.063, People and the Planet (required course for MIT Undergraduate Minor in Environment and Sustainability; cotaught with Professors Susan Solomon & Noelle Selin)
4. Sloan MBA Ethics Program: Voicing your values under pressure
5. Executive MBA (EMBA) Program: Leadership and Integrative Management (orientation program)
6. En-ROADS climate policy simulation (orientation activity for incoming MIT undergraduates)
7. 15.736, Introduction to System Dynamics (for Executive MBA program)
8. 15.737, Advanced System Dynamics (for EMBA and MIT Sloan Fellows students and alumni)
9. 15.871/15.873, Introduction to System Dynamics
10. 15.879, Doctoral Seminar in System Dynamics
11. MBA Orientation, Capstone event: Leadership in Action: The Beer Game (since 1988)
12. MIT EMBA, Sloan Fellows Program: Leadership in Action: The Beer Game
13. MIT Sloan Fellows Program: Interactive climate policy workshop (World Climate role play negotiation)
14. Guest lectures and workshops in courses in Ecology, Energy and Climate policy, others

Selected Professional Service and Organizations

1. Co-creator and Faculty director, MIT Sloan Sustainability Initiative. The initiative supports research, teaching and engagement with students, staff, and other constituencies around sustainability.
2. Co-creator of the MIT Sloan Sustainability Certificate Program. Certificates earned by graduate students who successfully complete 5 courses in sustainability. Co-creator and teacher in the core classes in sustainability, Strategies for Sustainable Business (15.913) and Laboratory for Sustainable Business (S-Lab; 15.915).
3. Senior Advisor, Climate Interactive (http://climateinteractive.org). Climate Interactive is a nonprofit 501(c)(3), nonpartisan organization dedicated to bringing rigorous climate science to leaders in government, business, civil society, education, and the public through interactive simulations that enable people to learn for themselves about climate science and policy.
4. Member since inception of the MIT Environmental Solutions Initiative https://environmentalsolutions.mit.edu and member of the ESI faculty advisory board and curriculum committee.
5. Member since inception of the MIT Campus Sustainability Task Force ("Walk the talk task force") charged with improving the sustainability of the campus and surrounding community, now the MIT campus decarbonization working group and Net Zero task force.
6. Member, MIT Climate Nucleus, charged with overseeing, improving, and implementing MIT's climate action plan.
7. Co-creator, MIT UPOP (Undergraduate Practice Opportunities Program)
8. Director, System Dynamics Group. Teaching and research in complex systems, systems thinking, sustainability.
9. President, System Dynamics Society (1992).
7. Associate Editor, *Behavioral Science and Policy, System Dynamics Review, Computational and Mathematical Theory, Production and Operations Management, Simulation and Gaming, Management Science (1993-1999), Journal of Economic Behavior and Organization (-2008)*
8. Member AAAS (and elected Fellow); Behavioral and Policy Sciences Association; INFORMS; Judgment/Decision Making Society; System Dynamics Society.
9. Referee for *PNAS, Nature Climate Change, Management Science*, *MSOM, Climatic Change, Admin. Sci. Quarterly, Acad. of Management Rev., Acad. of Management Discoveries, R&D Management, OBHDP*, *Operations Research, Organization Science, Physica A, Physics Letters, Am. J. Public Health, Vaccine, Bull. of the Am. Meteorological Society,* numerous other journals, NSF, NIH.
10. Scientific Advisory Board, Institute for Healthcare Improvement (through 2018).
11. Board, Alliance for Research on Corporate Sustainability (ARCS https://corporate-sustainability.org; through 2022).
12. Co-PI, MIT Climate CoLab, https://climatecolab.org (through 2019).
13. Program chair and organizer, International System Dynamics Conference: 2005, 2007 (50th anniversary of the field), 2017 (60th anniversary of the field), and System Dynamics Summer School, 2017.

Consulting

Pro-bono work for non-profits and government agencies in environmental sustainability, climate change policy, development planning, national security, and public health.

Consulting, expert testimony, and leadership development services for firms in the finance, computer, telecom, energy, manufacturing, construction, service, aerospace, and consulting industries, and US and other government agencies.

Selected Publications

Books, edited volumes, special issues

1. Sterman, J. and N. Repenning, eds. 2018. Celebrating the 60th Anniversary of the System Dynamics Field. *System Dynamics Review*, 34(1-2). 1-384. https://onlinelibrary.wiley.com/toc/10991727/2018/34/1-2.
2. Sterman, J. (ed., with E. Bendoly, K. Linderman, R. Oliva) 2015. Special issue of *Journal of Operations Management* on System Dynamics in Operations. Vol 39-40, November 2015. http://www.sciencedirect.com/science/journal/02726963/39-40.
3. Sterman, J. (ed.) 2007. Exploring the Next Great Frontier: System Dynamics at Fifty. Special double issue of *System Dynamics Review*, 23(2-3). http://onlinelibrary.wiley.com/doi/10.1002/sdr.v23:2/3/issuetoc.
4. Sterman, J. (ed.) 2007. Exploring the Next Great Frontier: System Dynamics at Fifty. 50th Anniversary Special Issue of *System Dynamics Review*. Vol. 23(2-3).
5. Sterman, J., ed. 2002. *The Global Citizen: Celebrating the Life of Dana Meadows.* System Dynamics Review. 18(2), Summer 2002 (Guest Editor, special issue).
6. Sterman, J. 2000. *Business Dynamics: Systems Thinking for a Complex World.* Irwin/McGraw-Hill; book website and curriculum resources at www.mhhe.com/sterman. (Winner, 2002 Jay W. Forrester Award.) Available in Japanese (2009), Chinese (2008), Czech (2005).
7. Sterman, J. 2001. *Instructor's Manual for Business Dynamics: Systems Thinking for a Complex World.* Irwin/McGraw-Hill.
8. Morecroft, J. & Sterman, J. (eds.) 1994. *Modeling for Learning Organizations.* Portland, OR: Productivity Press.

Journal Articles (recent working papers & articles under review at end of document)

1. Sterman, J., Moomaw, W., Rooney-Varga, J., & Siegel, L. 2022. Does wood bioenergy help or harm the climate? *Bulletin of the Atomic Scientists, 78*(3), 128-138. https://doi.org/10.1080/00963402.2022.2062933
2. Naumov, S., Keith, D., & Sterman, J. 2022. Accelerating Vehicle Fleet Turnover to Achieve Sustainable Mobility Goals. *Journal of Operations Management*. http://doi.org/10.1002/joom.1173.
3. Rahmandad, H., Sterman, J. 2022. Quantifying the COVID-19 Endgame: Is a New Normal within Reach? *System Dynamics Review*, 38(4), 329-353. https://doi.org/10.1002/sdr.1715.
4. Law, B., Moomaw, W., Hudiburg, T., Schlesinger, W., Sterman, J., & Woodwell, G. 2022. Create Strategic Reserves to Protect Forest Carbon and Reduce Biodiversity Losses in the United States. *Land, 11*(5). https://doi.org/10.3390/land11050721.
5. Greenspan, A., Kapmeier, F., Jones, A., & Sterman, J. 2021. Science-based Analysis for Climate Action: How HSBC Bank Uses the En-ROADS Climate Policy Simulation. *System Dynamics Review, 37*, 333-352. https://doi.org/10.1002/sdr.1697.
6. Rooney-Varga, J., Hensel, M., McCarthy, C., McNeal, K., Norfles, N., Rath, K., . . . Sterman, J. (2021). Building Consensus for Ambitious Climate Action through the World Climate Simulation. *Earth's Future, 9*(12). doi: https://doi.org/10.1029/2021EF002283.
7. Rahmandad, H., Lim, T-Y, Sterman, J. 2021. Behavioral Dynamics of COVID-19: Estimating Under-Reporting, Multiple Waves, and Adherence Fatigue Across 91 Nations. *System Dynamics Review* https://doi.org/10.1002/sdr.1673.
8. Karanfil, O. and J. Sterman 2020. "Saving lives or harming the healthy?" Overuse and fluctuations in routine medical screening. *System Dynamics Review* **36**(3): 294-329. https://doi.org/10.1002/sdr.1661.
9. Rooney-Varga, J., Kapmeier, F., Sterman, J., Jones, A., Putko, M., Rath, K. 2019. The Climate Action Simulation. *Simulation and Gaming*: 1-27. https://doi.org/10.1177/1046878119890643.
10. Sterman, J. 2019. Reply to commentaries on "System Dynamics at Sixty: The Path Forward." *System Dynamics Review* 35(1): 35-51. https://doi.org/10.1002/sdr.1626.
11. Sterman, J., Siegel, L., Rooney-Varga, J. 2018. Does replacing coal with wood lower CO_2 emissions? Dynamic lifecycle analysis of wood bioenergy. *Environmental Research Letters* 13(1): 015007. https://doi.org/10.1088/1748-9326/aaa512.

12. Sterman, J., Siegel, L., Rooney-Varga, J. 2018. Reply to: Comment on Sterman, et al. (2018) "Does replacing coal with wood lower CO2 emissions? Dynamic lifecycle analysis of wood bioenergy". *Environmental Research Letters* 13(12): 128003. https://doi.org/10.1088/1748-9326/aaf354.

13. Figueres, C., et al. (J. Sterman, co-signatory) 2018. Emissions are still rising: ramp up the cuts. *Nature* 564: 27-30. https://doi.org/10.1038/d41586-018-07585-6.

14. Rooney-Varga, J., Sterman, J., et al. 2018. Combining role-play with interactive simulation to motivate informed climate action: Evidence from the *World Climate* simulation." *PLoS One* 13(8): 1-28. https://doi.org/10.1371/journal.pone.0202877.

15. Sterman, J. 2018. System Dynamics at Sixty: The Path Forward. *System Dynamics Review* 34(1-2): 5-47. https://doi.org/10.1002/sdr.1601.

16. Holz, C., Siegel, L., Johnston, E., Jones, A., Sterman, J. 2018. Ratcheting Ambition to Limit Warming to 1.5°C: Trade-offs Between Emission Reductions and Carbon Dioxide Removal. *Environmental Research Letters* 13(6): 064028 https://doi.org/10.1088/1748-9326/aac0c1.

17. Keith, D., Naumov, S., Sterman, J. 2018. Supply Constraints and Waitlists in New Product Diffusion. *System Dynamics Review* 33(3-4): 254-279. https://doi.org/10.1002/sdr.1588.

18. Lane, D., Sterman, J 2018. A Model Simulator: The Lives of Jay W Forrester. *Journal of Simulation* 12(2): 90-97. https://doi.org/10.1080/17477778.2017.1404205.

19. Gary, S., M. Yang, P. Yetton, J. Sterman 2017. Stretch Goals and the Distribution of Organizational Performance. *Organization Science* 28(3):395-410. https://doi.org/10.1287/orsc.2017.1131.

20. Figueres, C., et al. (J. Sterman, co-signatory) 2017. Three years to safeguard our climate. *Nature* 546: 593-595. https://doi.org/10.1038/546593a.

21. Keith, D., Naumov, S., Sterman, J. 2017. Driving The Future: A Management Flight Simulator of the US Automobile Market. *Simulation and Gaming* 48(6): 735–769. https://doi.org/10.1177/1046878117737807.

22. Lyneis, J. and J. Sterman 2016. How to save a leaky ship: Capability traps and the failure of win-win Investments in sustainability and social responsibility. *Academy of Management Discoveries*. http://dx.doi.org/10.5465/amd.2015.0006.

23. Sterman, J. and G. Dogan 2015. "I'm not hoarding, I'm just stocking up before the hoarders get here" Behavioral causes of phantom ordering in supply chains. *Journal of Operations Management*. 39-40: 6-22. http://dx.doi.org/10.1016/j.jom.2015.07.002.

24. Sterman, J., et al. 2015. System Dynamics perspectives and modeling opportunities for research in Operations Management. *Journal of Operations Management* 39-40: 1-5. http://doi:10.1016/j.jom.2015.07.001.

25. Sterman, J. 2014. Interactive web-based simulations for strategy and sustainability: The MIT Sloan LearningEdge management flight simulators, Part I. *System Dynamics Review*. 30(1-2): 89-121.

26. Sterman, J. 2014. Interactive web-based simulations for strategy and sustainability: The MIT Sloan LearningEdge management flight simulators, Part II. *System Dynamics Review*. 30(3): 206-231.

27. Sterman, J., T. Fiddaman, *et al.* 2014. World Climate: A Role-Play Simulation of Global Climate Negotiations. *Simulation and Gaming*. Published online 9 January 2014. DOI http://10.1177/1046878113514935.

28. Kampmann, C. and J. Sterman 2014. Do Markets Mitigate Misperceptions of Feedback? *System Dynamics Review*. 30(3): 123-160.

29. Croson, R., K. Donohue, E. Katok, J. Sterman 2014. Order Stability in Supply Chains: The Impact of Coordination Stock. *Production and Operations Management*. 23(2): 176-196.

30. Pierson, K., J. Sterman 2013. Cyclical Dynamics of Airline Industry Earnings. *System Dynamics Review*. 29(3): 129-156.

31. Rahmandad, H. and J. Sterman 2012. Reporting Guidelines for Simulation-based Research in Social Sciences. *System Dynamics Review* 28(4): 396-411.

32. Sterman, J., T. Fiddaman, et al. 2012. Management Flight Simulators to Support Climate Negotiations. *Environmental Modelling and Software*. DOI http://dx.doi.org/10.1016/j.envsoft.2012.06.004.

33. Sterman, J. et al. 2012. Climate Interactive: The C-ROADS Climate Policy Model. *System Dynamics Review*. 28(3): 295-305. DOI http://dx.doi.org/10.1002/sdr.1474

34. Sterman, J. 2011. Communicating Climate Change Risks in a Skeptical World. *Climatic Change*. 108: 811-826.

35. Sterman, J. 2010. Does formal system dynamics training improve people's understanding of accumulation? *System Dynamics Review*. 26(4): 316-334.

36. Rahmandad, H., N. Repenning and J. Sterman 2009. Effects of Feedback Delay on Learning. *System Dynamics Review*. 25(4): 309-338.

37. Cronin, M., C. Gonzalez, J. Sterman 2009. Why Don't Well-Educated Adults Understand Accumulation? A Challenge to Researchers, Educators, and Citizens. *Organizational Behavior and Human Decision Processes*. 108, 116-130.

38. Sterman, J. 2008. Risk Communication on Climate: Mental Models and Mass Balance. *Science* 322: 532-533.

39. Struben, J. and J. Sterman 2008. Transition challenges for alternative fuel vehicle and transportation systems. *Environment and Planning B*. 35, 1070-1097.

40. Rahmandad, H. and J. Sterman 2008. Heterogeneity and Network Structure in the Dynamics of Diffusion: Comparing Agent-Based and Differential Equation Models. *Management Science*. 54(5), 998-1014.

41. Sterman, J., R. Henderson, et al. 2007. Getting Big Too Fast: Strategic Dynamics with Increasing Returns and Bounded Rationality. *Management Science* 53(4), 683-696.

42. Sterman, J. and L. Booth Sweeney 2007. Adults' Mental Models of Climate Change Violate Conservation of Matter. *Climatic Change* 80(3-4): 213-238.

43. Booth Sweeney, L. and J. Sterman 2007. Thinking about systems: Students' and their teachers' conceptions of natural and social systems. *System Dynamics Review* 23(2-3): 285-312.

44. Sterman, J. 2006. Learning from Evidence in Complex Systems. *American Journal of Public Health*. 96(3), 505-514.

45. Gonçalves, P., J. Hines, J. Sterman 2005. The Impact of Endogenous Demand on Push-Pull Production Systems. *System Dynamics Review*. 21(3), 187-216.

46. Ford, D. and J. Sterman 2003. Overcoming the 90% Syndrome: Iteration Management in Concurrent Development Projects. *Concurrent Engineering: Research and Applications* 11(3) 177-186.

47. Ford, D. and J. Sterman 2003. The Liar's Club: Concealing Rework in Concurrent Development. *Concurrent Engineering: Research and Applications* 11(3), 211-220.

48. Oliva, R., J. Sterman, et al. 2003. Limits to Growth in the New Economy: Exploring the 'Get Big Fast' Strategy in e-commerce. *System Dynamics Review* 19(2), 83-117.

49. Repenning, N. and J. Sterman 2003. E' difficile creare interesse resolvendo problemi che nonsi sono mai manifestati. *Quaderni di Management* 2 (March-April): 70-97. Originally published in *Calif. Management Review*, 2001 (Winner, 2001 Accenture Prize for Best Paper in Calif. Mgt. Rev.)

50. Sterman, J. 2002. All Models are Wrong: Reflections on Becoming a Systems Scientist: 2002 Jay W. Forrester Award Address *System Dynamics Review* 18(4) 2002: 501-531.

51. Repenning, N. and J. Sterman 2002. Capability Traps and Self-Confirming Attribution Errors in the Dynamics of Process Improvement. *Administrative Science Quarterly*. 47, 265-295.

52. Repenning, N. and J. Sterman 2002. Nobody Ever Gets Credit for Fixing Problems that Never Happened. *IEEE Engineering Management Review* 30(4): 64-78. Originally published in *Calif. Management Review*, 2001 (Winner, 2001 Accenture Prize for Best Paper in Calif. Mgt. Rev.)

53. Sterman, J. 2002. System Dynamics Modeling: Tools for Learning in a Complex World. *IEEE Engineering Management Review* 30(1): 42-52. Originally published in *Calif. Management Review*, 2001.

54. Sterman, J. 2002. Dana Meadows: Thinking Globally, Acting Locally. *System Dynamics Review* 18(2) 101-107.

55. Sterman, J. and L. Booth Sweeney 2002. Cloudy Skies: Assessing Public Understanding of Global Warming. *System Dynamics Review* 18(2), 207-240.

56. Sterman, J. 2002. System Dynamics Modeling for Project Management. *Projects and Profits*. II: 46-50.

57. Oliva, R. and J. Sterman 2001. Cutting Corners and Working Overtime: Quality Erosion in the Service Industry. *Management Science*. 47(7), 894-914.

58. Sterman, J. 2001. System Dynamics Modeling: Tools for Learning in a Complex World. *California Management Review* 43(4): 8-25.

59. Repenning, N. and J. Sterman 2001. Nobody Ever Gets Credit for Fixing Problems that Never Happened: Creating and Sustaining Process Improvement. *California Management Review* 43(4): 64-88. Winner, 2001 Accenture Award for best paper published in *CMR*.

60. Sweeney, L. and Sterman, J. 2000. Bathtub Dynamics: Initial Results of a Systems Thinking Inventory, *System Dynamics Review*, 16(4), 249-294.

61. Sterman, J. 2000. Learning in and About Complex Systems. *Reflections* (The Journal of the Society for Organizational Learning). 1(3), 24-29.

62. Sterman, J., & Wittenberg, J. 1999. Path Dependence, Competition and Succession in the Dynamics of Scientific Revolution. *Organization Science*. 10(3), 322-341.

63. Keating, E., R. Oliva, N. Repenning, S. Rockart, and J. Sterman 1999. Overcoming the Improvement Paradox, *European Management Journal* 17(2), 120-134.

64. Ford, D., & Sterman, J. 1998. Expert Knowledge Elicitation for Improving Mental and Formal Models. *System Dynamics Review*. 14(4), 309-340.

65. Ford, D. N., & Sterman, J. 1998. Dynamic Modeling of Product Development Processes. *System Dynamics Review*, 14(1), 31-68.

66. Sterman, J., Repenning, N., & Kofman, F. 1997. Unanticipated Side Effects of Successful Quality Improvement Programs: Exploring a paradox of organizational improvement. *Management Science.* 43(4), April, 503-521.

67. Cavaleri, S., & Sterman, J. 1997. Towards Evaluation of Systems Thinking Interventions: A Case Study. *System Dynamics Review*. 13(2).

68. Risch, J., Troyano-Bermúdez, L., & Sterman, J. 1995. Designing Corporate Strategy with System Dynamics: A Case Study in the Pulp and Paper Industry. *System Dynamics Review*, 11(4), 249-274.

69. Diehl, E., & Sterman, J. 1995. Effects of Feedback Complexity on Dynamic Decision Making. *Organizational Behavior and Human Decision Processes*, 62(2), 198-215.

70. Haxholdt, C., Kampmann, C., Mosekilde, E., & Sterman, J. D 1995. Mode Locking and Entrainment of Endogenous Economic Cycles. *System Dynamics Review*. 11(3), 177-198.

71. Sterman, J. 1994. Learning in and about Complex Systems. *System Dynamics Review.* 10 (2-3), 291-330.

72. Paich, M., & Sterman, J. 1993. Boom, Bust, and Failures to Learn in Experimental Markets. *Management Science.*39(12), 1439-1458.

73. Graham, A. K., Morecroft, J., Senge, P. M., & Sterman, J. 1992), Model Supported Case Studies for Management Education. *European Journal of Operational Research*. 59(1), 151-166.

74. Sterman, J. 1992. Teaching Takes Off: Flight Simulators for Management Education. *OR/MS Today* (Oct), 40-44.

75. Sterman, J. 1992. Long Wave Decline and the Politics of Depression. *Bank Credit Analyst*, 44(4), 26-42.

76. Sterman, J., 1990. A long Wave Perspective on the Economy in the 1990s. *Bank Credit Analyst.* 42(1), 28-47.

77. Davidsen, P., J. Sterman, and G. Richardson, 1990. A Petroleum Life Cycle Model for the United States with Endogenous Technology, Exploration, Recovery, and Demand. *System Dynamics Review.* 6(1), 66-93.

78. Sterman, J., 1989. Misperceptions of Feedback in Dynamic Decision Making. *Organizational Behavior and Human Decision Processes.* 43(3), 301-335.

79. Sterman, J., 1989. Modeling Managerial Behavior: Misperceptions of Feedback in a Dynamic Decision Making Experiment. *Management Science.* 35(3), 321-339.

80. Sterman, J., 1989. Deterministic Chaos in an Experimental Economic System *Journal of Economic Behavior and Organization.* 12, 1-28.

81. Ozveren, C. and J. Sterman, 1989. Control Theory Heuristics for Improving the Behavior of Economic Models. *System Dynamics Review.* 5(2), 130-147.

82. Sterman, J., 1988. Modeling the Formation of Expectations: The History of Energy Demand Forecasts. *International Journal of Forecasting.* 4, 243-259.

83. Sterman, J., 1988. Deterministic Chaos in Models of Human Behavior: Methodological Issues and Experimental Results. *System Dynamics Review.* 4, 148-178.

84. Sterman, J., G. Richardson, P. Davidsen, 1988. Modeling the Estimation of Petroleum Resources in the United States. *Technological Forecasting and Social Change.* 33(3) 219-249.

85. Sterman, J., 1987. Testing Behavioral Simulation Models by Direct Experiment. *Management Science.* 33(12), 1572-1592.

86. Sterman, J., 1987. Expectation Formation in Behavioral Simulation Models. *Behavioral Science.* 32, 190-211.

87. Sterman, J., 1986. The Economic Long Wave: Theory and Evidence. *System Dynamics Review.* 2(2), 87-125.

88. Sterman, J., 1986. Debt, Default, and Long Waves: Is History Relevant? *Bank Credit Analyst.* 38(5), 28-42.

89. Sterman, J., 1985. A Behavioral Model of the Economic Long Wave *Journal of Economic Behavior and Organization.* 6, 17-53.

90. Sterman, J., 1985. An Integrated Theory of the Economic Long Wave. *Futures.* 17, 104-131.

91. Sterman, J., 1985. The Growth of Knowledge: Testing a Theory of Scientific Revolutions with a Formal Model. *Technological Forecasting and Social Change.* 28(2) 93-122.

92. Rasmussen, S., E. Mosekilde, and J. Sterman, 1985. Bifurcations and Chaotic Behavior in a Simple Model of the Economic Long Wave. *System Dynamics Review.* 1(1) 92-110.

93. Sterman, J., and G. Richardson1985. An Experiment to Evaluate Methods for Estimating Fossil Fuel Resources. *Journal of Forecasting.* 4(2), 197-226.

94. Sterman, J. and D. L. Meadows 1985. STRATEGEM-2: A Microcomputer Simulation Game of the Kondratiev Cycle. *Simulation and Games.* 16(2), 174-202.

95. Wang, Q. and J. Sterman 1985. A Disaggregate Population Model of China. *Simulation.* 45(1) 7-14.

96. Sterman, J. 1984. Appropriate Summary Statistics for Evaluating the Historical Fit of System Dynamics Models. *Dynamica.* 10(2) 51-66.

97. Sterman, J. 1983. Economic Vulnerability and the Energy Transition. *Energy Systems and Policy* 7(4), 259-301.

98. Sterman, J. 1982. A Dynamic, Disequilibrium Model of Energy-Economy Interactions. *International Journal of Energy Systems.* 2(3) 159-163.

99. Maloney, S. and J. Sterman 1982. Policy Analysis of the Low-Level Radioactive Waste-Disposal Problem in the United States. *Nuclear Safety.* 23(3) 300-309.

Chapters in Edited Volumes

1. Gozluklu, B., & Sterman, J. (2023). System dynamics to understand and improve the performance of complex projects. In G. Winch, M. Brunet, & D. Cao (Eds.), *Research Handbook on Complex Project Organizing*. Cheltenham: Edward Elgar.

2. Gozluklu, B., & Sterman, J. (2023). A management flight simulator to catalyze learning about complex projects. In G. Winch, M. Brunet, & D. Cao (Eds.), *Research Handbook on Complex Project Organizing*. Cheltenham: Edward Elgar.

3. Rooney-Varga, J., Fracassi, E., Franck, T., Kapmeier, F., McCarthy, C., McNeal, K., Norfles, N., Rath, K., Sterman, J., 2021. A simulation game that motivates people to act on climate. In J. Dash (Ed.), *World Scientific Encyclopedia of Climate Change: Case Studies of Climate Risk, Action, and Opportunity* (Vol. 3, pp. 231-243). Singapore: World Scientific.

4. Struben, J., Keith, D, Sterman, J. 2015. Parameter and Confidence Interval Estimation in Dynamic Models: Maximum Likelihood and Bootstrapping Methods. *Analytical Handbook for Dynamic Modelers.* R. Oliva, H. Rahmandad and N. Osgood (eds.) Cambridge, MA, MIT Press.

5. Sterman, J. 2015. Stumbling towards Sustainability. In Henderson, R., Tushman, M., and Gulati, R. (eds.) *Organizational & Strategic Change and the Challenge of Sustainability.* Oxford University Press. 51-80.

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2. Karanfil, O., Sterman, J., et al. (2023) Simulation Modeling of Patterns and Trends of PSA Screening for Prostate Cancer: A Tool to Support Implementation Planning, Evaluation of Practice Guidelines and Workflows. 16th Annual Conference on the Science of Dissemination and Implementation of Health. Arlington, VA, Academy Health.

3. Karanfil, O., Sterman, J., et al. (2023) Case Study and Systems Model of PSA Screening for Early Detection of Prostate Cancer. The Early Detection of Cancer Conference. London, UK.

4. Correcting course to 1.5°C: Positive tipping points in the transition to net zero. OECD, COP28 Dubai, Dec. 7, 2023 https://www.oecd-events.org/cop28/session/fa3946c2-836e-ee11-a532-6045bd8ead8a/correcting-course-to-1-5-c-positive-tipping-points-in-the-transition-to-net-zero

5. Plenary presentation: MIT Climate Pathways: Which policies for the Paris Agreement? ChangeNOW conference, Paris, May 2023

6. Plenary presentation: MIT Climate Pathways: Policies to prevent every fraction of a degree. ChangeNOW conference, Paris, May 2023

7. Plenary presentation: Can simulated climate action motivate real-world decision-making? Bringing the En-ROADS simulator to leaders. International System Dynamics Conference, Chicago, July 2023 (with Juliette Rooney Varga, et al.)

8. En-ROADS Climate Workshops and interactive briefings in 2023:

   Central Intelligence Agency, Langley VA
   US Department of State Foreign Service Institute (online)
   Harvard Kennedy School
   International System Dynamics Conference
   Tsinghua University
   Universidad Nacional de Colombia, Medellin
   Accenture
   Bain
   Deloitte
   Russell Reynolds Associates
   Bradesco CEO Forum, New York
   Generali
   KK Wind Solutions
   Liberty Mutual Senior Leaders
   Total Energies
   Underwriters Laboratories
   Others not listed