PROFESSOR NEIL GANDAL

Berglas School of Economics, Tel Aviv University
School of Cyber Studies, University of Tulsa
https://www.neilgandal.com/

(October 2026)

EDUCATION

University of California, Berkeley	Ph.D.	December 1989 in Economics
University of Wisconsin	M.A.	May 1981 (Statistics)
Miami University	B.S.	December 1979 (Mathematics), B.A. (Economics)

CURRENT ACADEMIC APPOINTMENTS

The Henry Kaufman Chair Professor in International Capital Markets (2018-present)
Full Professor, Tel Aviv University, Berglas School of Economics (2007-present, emeritus from September 2025)
Full Professor, School of Cyber Studies, University of Tulsa (2022-present)
Research Fellow, Centre for Economic Policy Research (CEPR) (1999-present)
Head, The Pinhas Sapir Center for Development, Tel Aviv University (2020-2025)

PREVIOUS ACADEMIC APPOINTMENTS

Head, Berglas School of Economics, Tel Aviv University, 2012-2016
Visiting Professor, University of Texas, Department of Economics, 2014
Head, School of Government and Policy, Tel Aviv University, 2007 - 2012
Head, TAU International (formerly, the School for Overseas Students) 2010 - 2012
Chair, Department of Public Policy, Tel Aviv University, 2002 - 2007
Full Professor, Michigan State University, Dept. of Economics, 2003-2004
Full Professor, Tel Aviv University, Dept. of Public Policy, 2007 - 2012
Associate Professor, Tel Aviv University, Dept. of Public Policy, 2001 - 2007
Visiting Associate Professor, Haas School of Business, UC-Berkeley, 2000-2001
Visiting Associate Professor, University of Texas, Department of Economics, 1996-1997
Senior Lecturer, Tel Aviv University, Dept. of Public Policy, 1996 - 2001
Lecturer, Tel Aviv University, Department of Economics, 1991 - 1996
Assistant Professor, Boston University, Department of Finance and Economics, 1989 - 1992

HONORS

Special Invited Lecture on the Economics of Networks in "Workshop & Lecture Series on the Law & Economics of Innovation," joint ETH Zurich, University of Zurich and University of St. Gallen project, Zurich Switzerland, November, 2018.

Gave Keynote lecture at "Blockchain and Cryptofinance" conference in Paris, August 2018

Gave Keynote Lecture at 10th Paris Conference on Digital Economics, Paris, April 2018

Appointed as Honorary Editor of *International Journal of Industrial Organization*, 2013 (first Honorary editor of the journal)

Gave keynote Lecture at Management & Economics of ICT Conference, Munich, 2012

Gave keynote Lecture at Workshop on Industrial Organization: Theory, Empirics and Experiments, University of Salento, Otranto, Italy, 2011

Gave keynote Lecture at 7th ZEW Conference on the Economics of Information and Communication Technologies, University of Mannheim, Germany, 2009

Gave keynote Lecture at the 2nd Nordic Workshop in Industrial Organization, Norwegian School of Economics and Business Administration, Bergen, Norway, 1999

Named as a Fellow of the *International Journal of Industrial Organization*, 1997

CURRENT/RECENT MAJOR GRANTS

U.S. National Science Foundation (NSF): Award No. 2452738, "SaTC: CORE: Small: Measuring Systemic Cyber Risk" 2025-2028.

United States - Israel Binational Science Foundation (BSF), as part of the joint program with the U.S. National Science Foundation (NSF): NSF Award No. 2147505, BSF Award No. 2021711, "NSF-BSF: SaTC: CORE: Small: Evaluating Cybersecurity Precautions and Harms in Israeli Enterprises" 2022-2025.

United States - Israel Binational Science Foundation (BSF), as part of the joint program with the U.S. National Science Foundation (NSF) in Cyber Security and Privacy, *Examining the Impact of Cybersecurity Shocks on Cryptocurrency Platforms*, 2017-2020.

Blavatnik Interdisciplinary Cyber Research Center (ICRC), "Detecting Cryptocurrency Scams and Measuring Cryptocurrency Quality, 2018-2020

Blavatnik Interdisciplinary Cyber Research Center, "Values and Cyber Security," 2018-2020

Israel Science Foundation, *Network Dynamics and Knowledge Transfer Within and Across*

Virtual Organizations and Corporations, 2015-2017.

Blavatnik Interdisciplinary Cyber Research Center (ICRC), *Shocks to and Security in the Bitcoin Ecosystem: An Interdisciplinary Approach*, 2015-2017.

Israel Science Foundation, *Linking Pubic and Proprietary Knowledge Structures Within and Across Open Source Development Networks*, 2012-2015.

JOURNAL EDITORIAL POSITIONS

Associate Editor, *Management Science*, 2018 - 2024
Honorary Editor *International Journal of Industrial Organization*, 2013-present
Managing Editor *International Journal of Industrial Organization*, 2005 - 2012
Member, Editorial board, Review of Network Economics, 2009 - 2016
Panel Member, *Economic Policy*, 2005 – 2007
Associate Editor, *International Journal of Industrial Organization*, 1996 - 2004
Associate Editor, *Journal of Industrial Economics*, 1996 - 2002

PROFESSIONAL SERVICE – SCIENTIFIC COMMITTEES

Advisor to the U.S.-Israel Binational Science Foundation, 2020-2021, 2022-23.
Member, Scientific Committee, CEPR Workshop on Applied Industrial Organization, 2005-2014
Member, Scientific Committee, WEIS Economics of Information Security, 2007-2012, 2014-2019, 2021-2026.

SELECTED RECENT CONFERENCE PRESENTATIONS

Presented the paper "Quantifying costs of enhanced security in multifactor authentication" at the Munich Summer Institute, May 2024.

Presented the paper "Quantifying costs of enhanced security in multifactor authentication" at the 22nd Annual International Industrial Organization, Boston, May 2024.

Presented the paper "The uneven effect of the COVID-19 pandemic on US fatal road accidents" at the Epidemics and Economics conference, Tel Aviv University, January 2023.

Presented the paper "The Simple Economics of an External Shock to a Bug Bounty Platform" at the 20th Annual International Industrial Organization, Boston, April 2022.

Presented the paper "*An examination of the cryptocurrency pump and dump ecosystem*" at the Cryptocurrencies and Blockchains Conference at the University of Chicago, November 2019.

Presented the paper "*Network-Mediated Knowledge Spillovers: A Cross-Country Comparative Analysis of ICT/Information Security Innovations*" at Media Economics Conference, Braga, Portugal, October 2019.

Chair and Presenter in Special Policy Session on "Cryptocurrencies: What are the regulatory issues? at the CRESSE Conference, Rhodes, Greece, July 2019.

Presented the paper "*An examination of the cryptocurrency pump and dump ecosystem*" at the Bank of Italy, Rome, Italy, March 2019.

Presented the paper "*An examination of the cryptocurrency pump and dump ecosystem*" at the Economics of Intellectual Property, Software, and Internet Conference, Toulouse, France, January 2019.

Presented the paper "*Network-Mediated Knowledge Spillovers: A Cross-Country Comparative Analysis of ICT/Information Security Innovations*" at the CEPR Industrial Organization Conference, Brussels, Belgium, June 2018.

Presented the paper "*Network-Mediated Knowledge Spillovers: A Cross-Country Comparative Analysis of ICT/Information Security Innovations,*" at 16th Annual International Industrial Organization, Indianapolis, Indiana (US), April 2018

Presented the paper "*Network-Mediated Knowledge Spillovers: A Cross-Country Comparative Analysis of ICT/Information Security Innovations*" at the Economics of Intellectual Property, Software, and Internet Conference, Toulouse, France, January 2018.

Presented the paper "Price Manipulation in the Bitcoin Ecosystem" at the CESC 2017 - Cryptoeconomics and Security Conference, UC Berkeley, October 2017.

Presented the paper "*Following the Code: Spillovers and Knowledge Transfer*" at the Munich Summer Institute, May 2017.

Presented the paper "*Following the Code: Spillovers and Knowledge Transfer,*" at 15th Annual International Industrial Organization, Boston, USA, April 2017.

Presented the paper "*Following the Code: Spillovers and Knowledge Transfer*" at the ICT Conference, Paris, March 2017.

Presented the paper "*Ain't it "Suite"? Bundling in the PC Office Software Market*," at Riordanfest conference in honor of Michael Riordan, Columbia University, November 2016.

Presented the paper "*SSOs: Current Policy Issues and Empirical Evidence*," at the CRESSE Conference, Rhodes, Greece, July 2016.

Presented the paper "*Shocks to and Security in the Bitcoin Ecosystem: An Interdisciplinary Approach*," at the WEIS Conference, UC-Berkeley, June 2016.

Presented the paper "*Can We Predict the Winner in a Market with Network Effects? Competition in Cryptocurrency Market*," at the Munich Summer Institute, June 2016

Presented paper "Content exploration, choice and echo chambers: An experiment," at Economics of Intellectual Property, Software, and Internet Conference, Toulouse, France, January 2016.

PUBLICATIONS IN REFEREED JOURNALS

Systemic Cyber Risk: Linking Measurement, Market Incentives, and Policy (with Susan Athey and Tyler Moore), Journal of Economic Perspectives, Volume 40, Number 4, Fall 2026, Pages 1–22, available at https://140fae2e-18cc-48ca-8cda-2a483971aaf2.filesusr.com/ugd/1d4d58_4bbb3b62e027431ea8648c7e9f95feec.pdf

Bitcoin arbitrage: The role of an exchange (with Ethan Flowerday, Hanna Halaburda, Eric Olson, and Gabriela Ardel). Quantitative Finance and Economics, 2026, 10(3): 624-648. https://www.aimspress.com/article/doi/10.3934/QFE.2026024 (doi:) 10.3934/QFE.2026024

Personal Values and Cyber Risk-Taking (with Sonia Roccas and Zohar Weinstein), 2026, Journal of Economics & Management Research, available at https://srcpublishers.com/economics-management-research/article/view/7360/7684

Quantifying costs of enhanced security in multifactor authentication (with Seth Hastings, Tyler Moore, and Noa Barnir. 2025, Information Systems Frontiers, available at https://link.springer.com/article/10.1007/s10796-025-10641-y

A cost-benefit approach to optimizing security precaution adoption (with Noa Barnir, Tyler Moore, and Vincent Scott). 2025, Information and Computer Security, available at https://doi.org/10.1108/ICS-07-2024-0156

The Simple Economics of an External Shock to a Bug Bounty Platform (with Aviram Zrahia, Sarit Markovich, and Michael Riordan), Journal of Cybersecurity, Volume 10, Issue 1, 2024, available at https://academic.oup.com/cybersecurity/article/10/1/tyae006/7667075

The uneven effect of the COVID-19 pandemic on US fatal road accidents (with Maya Fuks and Keith Gandal), Medical Research Archives, 12(2). Available at https://esmed.org/MRA/mra/article/view/5053, 2024

Empirically evaluating the effect of security precautions on cyber incidents (with Tyler Moore, Michael Riordan, and Noa Barnir). Computers & Security, 133:103380, October 2023.

Long-Term Care Facilities as a Risk Factor for Death Due to COVID-19: Evidence from European Countries and U.S. States (with Matan Yonas, Michal Feldman, Ady Pauzner, Avraham Tabbach), Medical Research Archives, 11(3). Available at https://doi.org/10.18103/mra.v11i3.3633 , 2023.

The Microeconomics of Cryptocurrencies (with Hanna Halaburda, Guillaume Haeringer, and Joshua S. Gans,)NBER Working Paper No. 27477, Issued in July 2020, available at https://www.nber.org/papers/w27477. *Journal of Economic Literature*, 2022

Out of Sight: Patents that Have Never Been Cited, 2021, (with Michal Shur-Ofry, Michael Crystal, and Royee Shilony,) *Scientometrics*. Available at Available at http://dx.doi.org/10.2139/ssrn.3420061..

"An examination of the cryptocurrency pump and dump ecosystem," 2021 (with JT Hamrick, Farhang Rouhi, Arghya Mukherjee, Amir Feder, Tyler Moore, and Marie Vasek,) *Information Processing and Management*, Volume 58, Issue 4, available at https://www.sciencedirect.com/science/article/pii/S0306457321000169.

Gandal, N., Hamrick, J.T., Moore, T. et al. 2021, "The rise and fall of cryptocurrency coins and tokens," *Decisions in Economics and Finance*, available at https://doi.org/10.1007/s10203-021-00329-8

Network-Mediated Knowledge Spillovers in ICT/Information Security (with Nadav Kunievsky, and Lee Branstetter,) 2020, *Review of Network Economics*, available at https://docs.wixstatic.com/ugd/1d4d58_34756f36dbb24ceab5a2f61d6fe0fe78.pdf

Price Manipulation in the Bitcoin Ecosystem, 2018, (with JT Hamrick, Tyler Moore, and Tali Oberman,) *Journal of Monetary Economics*, https://doi.org/10.1016/j.jmoneco.2017.12.004.

"Ain't it "Suite? Bundling in the PC Office Software Market, 2018, (with Sarit Markovich and Michael Riordan,) *Strategic Management Journal*, https://onlinelibrary.wiley.com/doi/abs/10.1002/smj.2797

Following the Code: Spillovers and Knowledge Transfer, 2018, (with Peter Naftaliev and Uriel Stettner,) *Review of Network Economics,* https://doi.org/10.1515/rne-2017-0056.

"The Impact of DDoS and other security shocks on Bitcoin currency exchanges: Evidence from Mt. Gox," 2018, (with Amir Feder, JT Hamrick, and Tyler Moore,) *Journal of Cybersecurity*. Volume 3, Issue 2, June 2017, Pages 137–144, https://doi.org/10.1093/cybsec/tyx012.

"Network Dynamics and Knowledge Transfer in Virtual Organizations," 2016, (with Uriel Stettner,) *International Journal of Industrial Organization*, 48: 270-290.

"Can We Predict the Winner in a Market with Network Effects? Competition in Cryptocurrency Market," 2016 (with Hanna Halaburda,) *Games*, http://www.mdpi.com/2073-4336/7/3/16/pdf.

"Migration to the Cloud Ecosystem: Ushering in a New Generation of Platform Competition," (with Chaim Fershtman), *Communications & Strategies*, 85: 1st quarter 2012.

"Direct and Indirect Knowledge Spillovers: the "Social Network" of Open-Source Projects," 2011 (with Chaim Fershtman), *RAND Journal of Economics*, 42:70-91

"Network Security: Vulnerabilities and Disclosure Policy," 2010, (with Jay Pil Choi and Chaim Fershtman), *Journal of Industrial Economics*, 58:868-894

"Obesity and Price Sensitivity at the Supermarket," 2010 (with Anastasia Shabelansky), *Forum for Health Economics & Policy*, Bepress, volume 13, issue 2, Article 9

"The Social Network within a Management Recruiting Firm: Network Structure and Output," 2009, (with Charles King III and Marshall Van Alstyne), *Review of Network Econ*omics, vol. 8, no. 4, Article 2

"A Consistent Weighted Ranking Scheme with an Application to NCAA College Football Rankings," 2009, (with Itay Fainmesser and Chaim Fershtman), *Journal of Sports Economics*, 10: 582-600.

"Indirect Network Effects and Adoption Externalities", 2008, (with Jeffrey Church and David Krause) *Review of Network Economics* 7: 325-346.

"Open Source Software: Motivation and Restrictive Licensing," 2007, (with Chaim Fershtman) *International Economics and Economic Policy*, 4: 209-225.

"The Effect of Native Language on Internet Use," 2006, *The International Journal of the Sociology of Language*, 182:25-40.

"Personal Value Priorities of Economists," 2006, (with Sonia Roccas, Lilach Sagiv, Amy Wrzesniewski, *Human Relations*, 58: 1227-1252

"Technology, Trade, and Adjustment to Immigration in Israel," 2004, (with Gordon Hanson and Matt Slaughter) *European Economic Review,* 48: 403-428

"The DVD vs. DIVX Standard War: Empirical Evidence of Network Effects and Preannouncement Effects," 2003, (with David Dranove), *Journal of Economics and Management Strategy,* 12: 363-386

"Standards in Wireless Telephone Networks," 2003, (with David Salant and Leonard Waverman), *Telecommunications Policy*, 27: 325-332

"New Horizons: Telecommunications Policy in Israel in the 21st Century," 2003, *Israel Economic Review*, 1:2, 101-111

"Compatibility, Standardization, & Network Effects: Some Policy Implications," 2002, *Oxford Review of Economic Policy*, 18: 80-91

"The Dynamics of Competition in the Internet Search Engine Market," 2001, *International Journal of Industrial Organization*, 19: 1103-1117

"Standardization Policy and International Trade" (with Oz Shy), 2001*, Journal of International Economics*, 53: 363-383

"The Dynamics of Technological Adoption in Hardware/Software Systems: The Case of Compact Disc Players, 2000" (with Michael Kende and Rafael Rob), *RAND Journal of Economics*, 31: 43-61

"Systems Competition, Vertical Merger, and Foreclosure," 2000, (with Jeffrey Church), *Journal of Economics and Management Strategy*, 9:25-51

"Estimating the Effect of Tax Reform in Differentiated Product Oligopolistic Markets," 1999, (with Chaim Fershtman and Sarit Markovich), *Journal of Public Economics*, 74:151-170

"Deregulation and Reform in the Israeli Domestic Telecommunications Market," 1999*, The Economic Quarterly* (in Hebrew: An English version is available at my web site), 3: 439-455

"Adoptions and Orphans in the Early Microcomputer Market," 1999 (with Shane Greenstein and David Salant), *The Journal of Industrial Economics*, XLVII: 87-106

"The Effect of the Arab Boycott on Israel: The Automobile Market," 1998, (with Chaim Fershtman), *The RAND Journal of Economics,* 29: 193-214

"Tickling the Tolerance: Currency Reputation and Opportunism in Medieval France," (with Nathan Sussman), 1997, *The Journal of Money, Credit, and Banking:*29(4)

"Sequential Auctions of Interdependent Objects: Israeli Cable Television Licenses," 1997, *The Journal of Industrial Economics*, XLV: 227-244

"Strategic Entry Deterrence: Complementary Products as an Installed Base," (with Jeffrey Church), 1996, *European Journal of Political Economy (Symposium on Standardization)*, 12:331-354

"Competing Compatibility Standards and Complementary Network Externalities in the PC Software Market," 1995, *Review of Economics and Statistics*, 77: 599-608, 1995

"Hollygopoly: Oligopolistic Competition for (Hollywood) Movies," (with David Salant), 1995, *The Antitrust Bulletin,* 40: 699-712

"A Selective Survey of the Literature on Indirect Network Externalities," 1995, *Research in Law and Economics,* 17: 23-31

"Licensing a Sequence of Innovations, (with Katharine Rockett)," 1995, *Economics Letters*, 47:101-107

"Hedonic Price Indexes for Spreadsheets and an Empirical Test for Network Externalities," 1994, *The RAND Journal of Economics*, 25: 160-170

"Disadvantageous Semicollusion," (with Chaim Fershtman), 1994, *International Journal of Industrial Organization*, 12: 141-296, reprinted in Cartels, S. Salant and M. Lowenstein eds., Elgar Publishing 2005

"Experimentation and Learning with Network Externalities," (with Arthur Fishman), 1994, *Economics Letters*, 44: 103-108

"The Development of the Cable Television Industry in Israel, 1994," *Telecommunications Policy*, 18: 342-347

"Planned Obsolescence as an Engine of Technological Progress," (with Arthur Fishman and Oz Shy), 1993, *Journal of Industrial Economics*, XLI: 361-370

"Complementary Network Externalities and Technological Adoption," (with Jeffrey Church), 1993, *International Journal of Industrial Organization,* 11: 239-260

"Coordinating Research Through Research Joint Ventures," (with Suzanne Scotchmer), 1993, *Journal of Public Economics,* 51: 173-193

"Integration, Complementary Products and Variety," (with Jeffrey Church), 1992, *Journal of Economics and Management Strategy,* 1: 651-675

"Network Effects, Software Provision, and Standardization," (with Jeffrey Church), 1992, *Journal of Industrial Economics (Symposium on Compatibility),* XL 1: 85-104

CHAPTERS IN BOOKS

Consensus Mechanisms for the Blockchain (with Joshua Gans), in The Palgrave Handbook of Technological Finance, 269-286, 2021, edited by Raghavendra Rau, Robert Wardrop, and Luigi Zingales, available at https://link.springer.com/chapter/10.1007/978-3-030-65117-6_11

The High-Tech Sector in Israel (with Stefania Roccas Gandal, and Nadav Kunievsky), in "The Israeli Economy, 1995–2017 Light and Shadow in a Market Economy" (Chapter 17), 2021 Cambridge University Press, edited by Avi Ben-Bassat, Reuben Gronau, and Asaf Zussman, available at https://www.cambridge.org/core/books/israeli-economy-19952017/hightech-sector/E46E81CA4539EEB7A4ABF3CFC3B91355

"More (or Less) Economic Limits of the Blockchain," (with Joshua Gans,) NBER Working paper 2019, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3494434. Forthcoming, 2021, *Handbook of Technological Finance*.

"SSOs: Current Policy Issues and Empirical Evidence," (with Pierre Régibeau), 2015 in Edited Volume on International Standardization, Panagiotis Delimatsis, Cambridge University Press

"An Introduction to the Economics Literature on Standard Setting Organizations," in "The

Standards Edge: Unifier, or Divider," 2007, pps. 109-11, Sheridan Books

"Intellectual Property and Standardization Committee Participation in the U.S. Modem Industry," (with Nataly Gantman and David Genesove) 2007, pps. 208-230 in Standards and Public Policy, Shane Greenstein and Victor Stango editors, Cambridge University Press.

"Software Patents," (with Chaim Fershtman), 2006, pps. 11-29 (first chapter) in Industrial Organization and the Digital Economy, Gerhard Illing and Martin Peitz editors, MIT Press.

"Platform Competition in Telecommunications," 2005, (with Jeffrey Church) pps. 117-153, in The Handbook of Telecommunications Volume 2, M. Cave, S. Majumdar, and I. Vogelsang editors, Elsevier

"Surviving a Standards War: Lessons Learned from The Life and Death of DIVX, (with David Dranove)" 2005, pps. 1-14 (first chapter) in Advances in the Economics of Information Systems, Kerem Tomak editor, *Idea Group Inc*

"Network Effects, Standardization, and the Internet: What have we learned from the DVD vs. DIVX Battle? (with David Dranove)," pps. 461-477, in The Commodification of Information, Niva Elkin-Koren and Neil Netanel editors, 2002, *Kluwer Law International*

"Quantifying the Trade Impact of Compatibility Standards and Barriers: An Industrial Organization Perspective," pps. 137-153, in Quantifying the Impact of Technical Barriers to Trade, Keith Maskus and John Wilson editors, 2001, *University of Michigan Press*

"Sorting Out the Search Engine Market," pps. 351-367, in Communications Policy in Transition, The Internet and Beyond, Ben Compaine and Shane Greenstein editors, 2001, *M.I.T. Press.*

OTHER PUBLICATIONS

Analyzing Target-Based Cryptocurrency Pump and Dump Schemes (with JT Hamrick, Farhang Rouhi, Arghya Mukherjee, Marie Vasek, and Tyler Moore), ACM CCS Workshop on Decentralized Finance and Security, and ACM conference proceedings, 2021

Fershtman, C., and N. Gandal, "A Brief Survey of the Economics of Open Source Software," The New Palgrave Dictionary of Economics, Palgrave Macmillan" 2011, London UK

"An Introduction to Key Themes in the Economics of Cyber-security," 2007 Encyclopedia of Cyber Warfare and Cyber Terrorism, Idea Group Inc

Review of "The Economics of Information Technology: An Introduction" by Hal R. Varian, Joseph Farrell, and Carl Shapiro, 2006, *Journal of Economic Literature* XLIV, 2:459-461.

"Network Effects (Empirical Studies)," 2006, New Palgrave Dictionary of Economics, 2nd

edition, S. Durlauf and L. Blume editors, Palgrave Macmillan, London UK.

REFEREE FOR THE FOLLOWING JOURNALS

American Economic Review
Canadian Journal of Economics
European Economic Review
European Journal of Political Economy
International Journal of Industrial Organization
Journal of Economics and Management Strategy
Journal of Economic Behavior and Organization
Journal of Industrial Economics
Journal of International Economics
Journal of Organizational Computing and Electronic Commerce
Journal of Public Economics
Management Science
National Science Foundation
RAND Journal of Economics
Review of Economics & Statistics
Review of Economic Studies
Strategic Management Journal