

Christiane Barz

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Education

2004 – 2006	<i>Karlsruhe Institute of Technology, Germany,</i> Graduate School of Information Management and Market Engineering Doctorate Degree (Dr. rer. pol. – with honors)
2001 – 2002	<i>Universitat de Barcelona, Spain</i> Sokrates Scholar at the Department of Economics
1998 – 2004	<i>Karlsruhe Institute of Technology, Germany</i> School of Economics and Business Engineering Diploma in Industrial Engineering (Dipl. Wi.-Ing. – with honors)

Academic Positions

2016 – today	<i>University of Zurich, Switzerland</i> Full Professor, Mathematics for Business and Economics
2015 – 2016	<i>Technical University of Berlin, Germany</i> Full Professor, Operations and Production Management
2009 – 2015	<i>University of California at Los Angeles, California</i> Assistant Professor (tenure track) at the Anderson School of Management
2013	<i>Karlsruhe Institute of Technology, Germany</i> Visiting Professor at the Karlsruhe Service Research Institute
2007 – 2009	<i>University of Chicago, Illinois</i> Postdoctoral researcher working in the Operations Management Group of the Booth School of Business
2006 – 2007	<i>Karlsruhe Institute of Technology, Germany</i> Postdoctoral researcher working under Prof. Dr. Waldmann at the Institute for Economic Theory and Operations Research

Awards and Distinctions

2020	Teacher of the Hour 2020 for outstanding teaching when transitioning to online teaching due to Corona
2020	Teaching Award “Goldener Schwamm” for outstanding teaching to first year Bachelor students
2016	Hector Teaching Award of the Hector School of Engineering and Management, Karlsruhe Institute of Technology, Germany
2015	Global Executive MBA for Asia Pacific Teaching Excellence Award at the UCLA Anderson School of Management
2012	George Robbins Assistant Professor Teaching Award at the UCLA Anderson School of Management
2010	Hector Teaching Award 2008/2009 of the Hector School of Engineering and Management, Karlsruhe Institute of Technology, Germany
2008 and 2009	Exceptional Service award in the Executive MBA Program of the Booth School of Business, University of Chicago
2007	GOR Dissertation Award for outstanding thesis awarded by the German society for operations research

2007	Erna-Scheffler Award for outstanding academic achievement by a female researcher
2006	Best Paper Award of the Graduate School of Information Management and Market Engineering 2006
2005	Faculty Award (Fakultätspreis), School of Economics and Business Engineering, Karlsruhe Institute of Technology, for best diploma thesis
2002	Jubiläumsstaatsstiftung Award for outstanding Bachelor degree (Vordiplom)

Publications

Peer Reviewed Journal Publications:

- Barz, C., Gönsch, J. (2027). 50 Years of Revenue Management – A European Perspective. *European Journal of Operational Research*, Vol. 336 (1), pp 3-38.
- Barz, C., and Laumer, S. (2026). OR for the Classroom: the linear programming approach to approximate dynamic programming for Markov decision processes. *Mathematical Methods of Operations Research*, forthcoming
- Adelman, D., Barz, C., and Olivares-Nadal, A. (2025). Dynamic Basis Function Generation for Network Revenue Management. *INFORMS Journal on Computing* 0(0), forthcoming
- Barz, C., Gönsch, J., Rauhaus, D. and He, S. (2025). Dynamic pricing with (extra) seat reservations under the nested logit model. *OR Spectrum*, Vol. 47, pp. 1133-1179
- Laumer, S., Barz, C. (2023). Reductions of Non-Separable Approximate Linear Programs for Network Revenue Management. *European Journal of Operational Research*, Vol. 309 (1), pp 252-270.
- Barz, C., S. Laumer, M. Freyschmidt and J. Martinez-Blanco (2023): Discrete dynamic pricing and application of network revenue management for FlixBus. *Journal of Revenue and Pricing Management*, Vol. 22, pp 16-33
- Barz, C. and D. Gartner (2016): Network Air Cargo Revenue Management. *Transportation Science*, Vol. 50 (4), pp 1206-1222.
- Barz, C. and K. Rajaram (2015). Elective Patient Admission and Scheduling under Multiple Resource Constraints. *Production and Operations Management*, Vol. 24 (12), pp. 1907-1930.
- Adelman, D. and C. Barz (2014). A Price-Directed Heuristic for the Economic Lot Scheduling Problem. *IIE Transactions*, Vol. 46, pp. 1343-1356.
- Adelman, D. and C. Barz (2014). A Unifying Approximate Dynamic Programming Model for the Economic Lot Scheduling Problem. *Mathematics of Operations Research*, Vol. 39 (2), pp. 374-402.
- Barz, C. and R. Kolisch (2014). Hierarchical Multi-Skill Resource Assignment in the Telecommunications Industry. *Production and Operations Management*, Vol. 23 (3), pp. 489-503.
- Duda, C., K. Rajaram, C. Barz and T. Rosenthal (2013). A Framework for Improving Access and Customer Service Times in Health Care: Application and Analysis at the UCLA Medical Center. *The Health Care Manager*, Vol. 32(3), pp. 212-26.
- Barz, C. and A. Müller (2012). Comparison and Bounds for Functions of Future Lifetimes Consistent with Mortality Tables. *Insurance: Mathematics and Economics*, Vol. 50, pp. 229-235.
- Barz, C. and A. Müller (2012). A Tilting Algorithm for the Estimation of Fractional Age Survival Probabilities. *Lifetime Data Analysis*, Vol. 18, pp. 234-246, 2012, with A. Müller.
- Barz, C. and K.-H. Waldmann (2007) Risk-Sensitive Capacity Control in Revenue Management" *Mathematical Methods of Operations Research*, Vol. 65, pp. 565-579.

Monographs:

- Barz, C. (2026). *Mathematik für Wirtschaftswissenschaftler - Eine präzise und anwendungsorientierte Einführung*, Springer Gabler Wiesbaden (p.830).
- Barz, C. (2007). *Risk-Averse Capacity Control in Revenue Management*. Lecture Notes in Economics and Mathematical Systems, Vol. 597, Springer (p.173).

Other Publications:

- Bäker, A., Barz, C. and Gorich, E. (2025). Monday morning: should I sleep in or Zoom in? If (and when) lecture attendance relates to academic performance. *VSH-AEU-Bulletin 3: Mathematics: The Beauty of Mathematical Reasoning*, October 2025, pp. 38-44.
- Barz, C., Sharif Azadeh, S. Revenue management for complex systems. *OR Spectrum* 47, 1071–1074 (2025)
- Barz C. and N. Bäuerle (2023). Risk-sensitive Markov Decision Processes. In: Pardalos, P.M., Prokopyev, O.A. (eds) *Encyclopedia of Optimization*. Springer, Cham. https://doi.org/10.1007/978-3-030-54621-2_818-1
- Barz, C., Glanzer, M. (2023). Approximate Dynamic Programming: Linear Programming-Based Approaches. In: Pardalos, P.M., Prokopyev, O.A. (eds) *Encyclopedia of Optimization*. Springer, Cham. https://doi.org/10.1007/978-3-030-54621-2_818-1
- Barz, C. (2008). Expected Additive Time-Separable Utility Maximizing Capacity Control in Revenue Management. Kalcsics, J. and Nickel, S.(eds): *Operations Research Proceedings 2007*, pp. 3-8.
- Barz, C. (2008). Risikoaverse Kapazitätssteuerung im Revenue Management. *OR News*, Vol.33, pp. 23-25.
- Barz, C. and K.H. Waldmann (2007). Risk-Sensitive Decision Support for Admission Control. Köppen, V. and Müller, R. M. (eds), *Business Intelligence: Methods and Applications*, pp.165-174, Dr. Kovac Verlag.
- Barz, C. (2006). How does Risk Aversion Affect Optimal Revenue Management Policies? – A Simulation Study. Mattfeld, D. and Suhl, L. (eds), *DSOR Contributions to Information Systems* (Proceedings of the Mulikonferenz Wirtschaftsinformatik), Vol. 3, pp. 161-172.
- Barz, C. and K.H. Waldmann (2006). An Application of Markov Decision Processes to the Seat Inventory Control Problem. Morlock, M., Schwindt, C., Trautmann, N., and Zimmermann, J.(eds), *Perspectives on Operations Research*, pp. 113-128.
- Barz, C., M. Uhrig-Homburg and K.-H. Waldmann (2006). Yield Management: Beyond Expected Revenue. Dreier, T., Studer, R., and Weinhardt, C. (eds), *Information Management and Market Engineering*, pp. 71-84.
- Schepperle, H., C. Barz, K. Böhm, J. Kunze, C. M. Laborde, S. Seifert, and K. Stockmar(2006). Auction Mechanisms for Traffic Management. Seifert, S. and Weinhardt, C. (eds), *Group Decision and Negotiation Proceedings*, pp. 214–217.
- Branke, J., C. Barz and I. Behrens (2003). Ant-Based Crossover for Permutation Problems. Cantu-Paz, E. (eds), *Genetic and Evolutionary Computation Conference*, Lecture Notes In Computer Science 2273, pp. 754-765.

Working Papers and Work in Progress

- Risk-Sensitive Network Revenue Management. Under review, with M. Glanzer.
- The Cost of Showmanship. Work in Progress with J. Ren, O. Sahin and D. Saure.
- Assemble-to-Order Systems with Random Yield. Work in Progress, with S. Laumer, N. Yang and X. Geng.
- Dynamic Ride Acceptance with Advance Booking. Work in Progress, with U. Mohring.
- Dynamic Assortment and Review Management. Work in Progress, with F. Gerzner.

- Fans as Co-Producers: Stadium Atmosphere and Dynamic Ticket Pricing. Work in Progress, with S. Colmberg.

Teaching Experience

- Lecturer for Master-level course “Revenue Management Revenue Management: Models and Managerial Insights” at the Faculty for Business, Economics, and Informatics at University of Zürich
- Co-Lecturer for “Operations and Supply Chain Management” in the Executive MBA Program at the University of Lucerne, 2026
- Co-Lecturer of Bachelor level seminar “Optimization in SpORts” at the Faculty for Business, Economics, and Informatics at University of Zürich, since 2023
- Co-Lecturer of PhD seminars “Doing Research in Operations Management” and “Following Research in Operations Management” at the Faculty for Business, Economics, and Informatics at University of Zürich since 2023
- Lecturer for “Service, Operations and Logistics for Industry 4.0” in the Executive MBA Program of the University of Zürich since 2020
- Lecturer for “Introduction to Operations Research: Stochastic Models” in the Master Program of the Faculty for Business, Economics, and Informatics at University of Zürich, since 2016
- Lecturer for “Mathematics I and II” in the Bachelor Program of the Faculty for Business, Economics, and Informatics at University of Zürich, since 2016
- Co-Lecturer of Master level seminar “Revenue Management” at the Faculty for Business, Economics, and Informatics at University of Zürich, 2023-2025
- Lecturer for “Service and Operations Management” in the Executive MBA Program of University of Zürich, 2019-2020
- Lecturer for “Statistics for Management Decisions” in the MSOL Program at UCLA, Summer 2016
- Lecturer for “Production Management” in the Bachelor program at TU Berlin, Summer and Fall 2015
- Lecturer for “Stochastic Models in Operations Management” in the Bachelor and Master program at TU Berlin, Fall 2015
- Lecturer for “Optimization Methods in Service Management” in the Bachelor and Master program at TU Berlin, Summer and Fall 2015
- Organization of the “Operations Management Colloquium” in the Graduate program at TU Berlin, 2015
- Lecturer for “Model Building in Operations Management” for the MSc program in logistics at the Haus der Technik, Aachen, Germany, 2014
- Lecturer for “Data Analysis and Management Decisions” in the Global Executive MBA Program for the Americas, Anderson School of Management, UCLA, 2012-today
- Organization of the Ph.D. Seminar in Decisions, Operations, and Technology Management, Anderson School of Management, UCLA, 2010- today
- Lecturer for “Applied Stochastic Processes” in the PhD program Anderson School of Management, UCLA, 2011
- Lecturer for “Data and Decisions” in the full time MBA program, Anderson School of Management, UCLA, 2009- today
- Lecturer for “Simulation and Case Studies” in the international MSc and MBA module Stochastics and Games, Hector School of Engineering and Management, Karlsruhe, 2006, 2009, 2012, 2014

- Teaching Assistant for “Operations Management” in the weekend and executive MBA program and for “Managerial Spreadsheet Modeling” in the evening MBA program, Booth School of Business, University of Chicago, 2008
- Teaching Assistant positions for classes in Operations Research, Simulation, Stochastic Dynamic Programming, Quality Control, OR Methods in Revenue Management, Statistics, Econometrics, Algorithms for Internet Applications and Java-Programming at the School of Economics and Business Engineering, Karlsruhe Institute of Technology, 1999-2007

Editorial Work

- Associate Editor for IMA Journal of Management Mathematics since 2024
- Associate Editor for OR Spectrum since 2015
- Associate Editor for Mathematical Methods of Operations Research since 2015
- Guest editor for special issue on “Pricing and Revenue Management for Complex Systems”, OR Spectrum 2025
- Associate Editor for the Journal of Revenue & Pricing Management 2014-2015
- Reviewer for Operations Research, Management Science, Mathematics of Operations Research, Manufacturing and Service Operations Management, Production and Operations Management, Computers and Operations Research, Transportation Science, European Journal of Operational Research, IIE Transactions, Decision Sciences, Journal of Revenue and Pricing Management, Mathematical Methods of Operations Research, OR Spectrum, Communications in Statistics – Theory and Methods, International Journal of Production Economics, Journal of Business Economics, Journal of Sports Economics

Other Professional Service

- Deputy Director of the Department of Business Administration, University of Zurich, since 2021
- Advisory Board Member GOR since 2026
- Member of the Risk Management Committee UZH, since 2025
- Board member of SVOR/ASRO since 2025
- Board Member of the EURO Working Group for Pricing and Revenue Management since 2018
- Faculty Representative in the UZH Research Committee, 2019-2025
- Selection Committee Member of FAN Fellowship, 2019-2025
- Selection Committee Member of SNF Doc Mobility and Early Postdoc Mobility Grants 2019-2021
- Member of the Legislative Assembly of the Academic Senate and the UC Assembly of the Academic Senate 2013-2015, faculty advisor of the Women's Business Connection (WBC) 2013-2015
- Review panelist for the National Science Foundation (NSF), 2013

Miscellaneous

- Member of INFORMS (RMP, MSOM and WORMS), GOR and SVOR/ASRO
- Completion of HIT Program (High Potential University Leaders Identity & Skills Training Program) 2023
- Faculty advisor for scholars of the “Studienstiftung des deutschen Volkes” 2016-2017
- Grants: Exist 2016, Easton Research Grant 2014, Easton Research Grant 2011, Travel Grants 2010, 2011, 2013

- “Baden-Württemberg-Zertifikat für Hochschuldidaktik“ (Completion of an accredited training on the development of teaching skills comprising 200 hours) 2008
- Scholarship of the German National Academic Foundation (Studienstiftung des Deutschen Volkes) 2001-2004
- Languages: Fluent in English and German (native), working knowledge of Spanish

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