

AHMED KHWAJA
Curriculum Vitae

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Contact Information

Cambridge Judge Business School
University of Cambridge
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Research Interests

Retail Chain Dynamics, Health Care Markets, Market Entry and Expansion, Pharmaceutical R&D and Innovation, Experience Spillovers

Research Fields

Dynamic Oligopoly Models, Dynamic Models of Consumer Choices, Asymmetric Information & Incomplete Markets, Estimation of Strategic Games, Simulation Based Econometric Methods

Current Positions and Affiliations

Professor of Marketing, Business and Public Enterprise, Cambridge Judge Business School
Visiting Fellow, Yale Center for Customer Insights, Yale School of Management
Faculty Affiliate, Health Sector Management, Fuqua School of Business, Duke University

Previous Positions and Affiliations

Reader (Associate Professor) of Marketing, Cambridge Judge Business School
Visiting Associate Professor of Marketing, Yale School of Management
Assistant Professor of Marketing, Yale School of Management
Faculty Fellow, Yale Center for Customer Insights, Yale School of Management
Faculty Research Staff, Cowles Foundation for Research in Economics, Yale University
Melville Blake '80 Visiting Summer Fellow, Yale School of Management
Assistant Professor of Business Economics, Fuqua School of Business, Duke University
Visiting Graduate Student, Department of Economics, University of Pennsylvania

Education

Ph.D. Department of Economics, University of Minnesota

Thesis: "Health Insurance, Habits and Health Outcomes: A Dynamic Stochastic Model of Investment in Health."

Advisor: Michael P. Keane

Publications

1. "Firm Expansion, Size Spillovers and Market Dominance in Retail Chain Dynamics," with Jason Blevins and Nathan Yang, *Management Science*. Vol. 64(9), pp. 4070-4093, 2018.
2. "The Dynamic Spillovers of Entry: An Application to the Generic Drug Industry," with Ron Gallant and Han Hong, *Management Science*, Vol. 64(3), pp. 1189-1211, 2018a.
3. "A Bayesian Approach to Estimation of Dynamic Models with Small and Large Number of Heterogeneous Players and Latent Serially Correlated States," with Ron Gallant and Han Hong, *Journal of Econometrics*, Vol. 203(1), pp. 19-32, 2018b.
4. "Short Run Needs and Long Term Goals: A Dynamic Model of Thirst Management," with Guofang Huang and K. Sudhir, *Marketing Science*, Vol. 34 (5), pp. 702-721, 2015.
5. "Moral Hazard, Adverse Selection and Health Expenditures: A Semiparametric Analysis," with Patrick Bajari, Christina Dalton and Han Hong, *RAND Journal of Economics*, Vol. 45 (4), pp. 747-763, 2014.
 - Honorable Mention Ken Arrow Award for best paper in Health Economics in 2014.
6. "Structural Models of Complementary Choices," with Steve Berry, Vineet Kumar, Andres Musalem, Kenneth C. Wilbur, Greg Allenby, Bharat Anand, Pradeep Chintagunta, W. Michael Hanemann, Przemek Jezierski, Angelo Mele, *Marketing Letters*, Vol. 25 (3), pp. 245-256, 2014.
7. "Habit Persistence and Teen Sex: Could Increased Access to Contraception Have Unintended Consequences for Teen Pregnancies?" with Peter Arcidiacono and Lijing Ouyang, *Journal of Business & Economic Statistics*, Vol. 30 (2), pp. 312-325, 2012.
8. "A Comparison of Treatment Effects Estimators Using a Structural Model of AMI Treatment Choices and Severity of Illness Information from Hospital Charts," with Gabriel Picone, Martin Salm and Justin Trogdon, *Journal of Applied Econometrics*, Vol. 26 (5), pp. 825-853, 2011.
9. "Estimating Willingness to Pay for Medicare Using a Dynamic Life-Cycle Model of Demand for Health Insurance," *Journal of Econometrics*, Vol. 156 (1), pp. 130-147, 2010.
10. "Do Smokers Value Their Health and Longevity Less?" with Frank Sloan and Yang Wang, *Journal of Law and Economics*, Vol. 52(1), pp. 171-196, February 2009.
11. "Are Mature Smokers Misinformed?" with Dan Silverman, Frank Sloan and Yang Wang, *Journal of Health Economics*, Vol. 28(2), pp. 385-397, March 2009.

12. "The Relationship Between Individual Expectations and Behaviors: Evidence on Mortality Expectations and Smoking Decisions," with Frank Sloan and Sukyung Chung, *Journal of Risk and Uncertainty*, Vol. 35(2), pp. 179-201, October 2007.
13. "Time Preference, Time Discounting and Smoking Decisions," with Dan Silverman and Frank Sloan, *Journal of Health Economics*, Vol. 26(5), pp. 927-949, September 2007.
14. "Testing the Mechanisms of Structural Models: The Case of the Mickey Mantle Effect," with Hanming Fang, Michael Keane, Martin Salm and Dan Silverman, *American Economic Review, Papers & Proceedings*, Vol. 97(2), pp. 53-59, May 2007.
15. "Smoking, Wealth Accumulation and the Propensity to Plan," with Dan Silverman, Frank Sloan and Yang Wang, *Economics Letters*, Vol. 94(1), pp. 96-103, January 2007.
16. "Learning about Individual Risk and the Decision to Smoke," with Frank Sloan and Sukyung Chung, *International Journal of Industrial Organization*, Vol. 24(4), pp. 683-699, July 2006a.
17. "Evidence on Preferences and Subjective Beliefs of Risk Takers: The Case of Smokers," with Frank Sloan and Martin Salm, *International Journal of Industrial Organization*, Vol. 24(4), pp. 667-682, July 2006.
 - The Paul Geroski Prize for the best paper published in 2006 in *IJIO*.
18. "The Effects of Spousal Health on the Decision to Smoke: Evidence on Consumption Externalities, Altruism and Learning Within the Household," with Frank Sloan and Sukyung Chung, *Journal of Risk and Uncertainty*, Vol. 32(1), pp. 17-35, January 2006b.
19. "Health Insurance, Habits and Health Outcomes: Moral Hazard in a Dynamic Stochastic Model of Investment in Health," in *Proceedings of the 2002 North American Summer Meetings of the Econometric Society: Labor Economics and Applied Econometrics*, edited by Anne Case, Raquel Fernandez, John Rust, Ken Wolpin.

Working Papers

20. "A Quantitative Analysis of Customer Satisfaction and Employee Engagement in the Car Rental Industry," with Nathan Yang, working paper, Judge Business School, University of Cambridge, 2020, revise & resubmit.
21. "The Effects of Early and Late Stage Collaboration Experience on Pharmaceutical Product Development," with Rebeca Méndez Durón, working paper, Judge Business School, University of Cambridge, 2020, revise & resubmit.

22. “Moral Hazard and the ‘Mickey Mantle’ Effect in a Dynamic Model of Demand for Health Related Consumption,” working paper, Judge Business School, University of Cambridge, 2020, under revision.

Work in Progress

“Market Expansion While Balancing Social and Financial Objectives: Evidence From Microfinance Enterprises in Bangladesh,” with Jarrod Vassallo and Jaideep Prabhu.

“Health Insurance Reform and the (Re-)Distribution of Welfare: A Dynamic Model of Savings, Health Insurance, and Medical Expenditures,” with Matthew White.

“Computationally Feasible Conditional Choice Probability Based Estimation of Dynamic Discrete Choice Models with Big Data Using Reinforcement Learning,” with Sonal Srivastava.

“The Role of Corporate Structure in Retail Chain Dynamics: Evidence from Home Improvement Stores During the Great Recession,” with Jason Blevins.

“A Dynamic Model of Strategic Partnerships in FDA Trials,” with Rebeca Méndez Durón.

Grants

2013-14 “Dynamic Feedback Between Employee Engagement, Productivity and Customer Loyalty,” with Nathan Yang, Wharton Customer Analytics Initiative Data Award.

2009-13 “Deterring Drunk Driving: Beliefs, Preferences, Outcomes, and Welfare Implications,” Co-PI, with Hanming Fang, Co-PI and Frank Sloan, PI, NIAAA, R01 (\$1,994,000)

2005-09 “Structural Models of Consumer Optimization Behavior,” Co-PI with Donna Gilleskie, NIA R13 (\$20,000)

2005-08 “Structural Models of Consumer Optimization Behavior: Labor, Retirement, and Health,” Co-PI with Donna Gilleskie, The Demography and Economics of Aging Research Program, UNC (\$10,000)

2004-06 “A Dynamic Model of Teen Sex, Abortion and Childbearing,” PI, with Peter Arcidiacono, Co-PI, NICHD R03 (\$154,000)

2004-07 “Why Don’t Mature Smokers Quit?” Co-PI with Dan Silverman, Co-PI and Frank Sloan, PI, Robert Wood Johnson Foundation (\$499,000)

1999-01 “A Dynamic Stochastic Model of Investment in Health,” PI, AHRQ
Dissertation Grant, R03 (\$31,000)

Honors and Awards

2020 CJBS Annual Teaching Award

2019 CJBS Annual Faculty Activity Award

2015 Honorable Mention Ken Arrow Award for best paper in Health Economics
published in 2014.

2007 “The Paul Geroski Best Article” Prize for the best paper published in 2006
in the *International Journal of Industrial Organization*.

Editorial and Professional Service (current and previous)

Associate Editor, *Management Science*, 2016-18

Editorial Review Board, *Marketing Science*, 2016-18

Co-Guest Editor, *Journal of Econometrics*, Annals Issue “Structural Models of Consumer
Optimization Behavior.”

Reviewer for: American Economic Journal: Applied Economics, American Economic
Review, B.E. Journal of Economic Analysis & Policy, Economic Journal, Health
Economics, International Economic Review, Journal of Applied Econometrics, Journal of
Business and Economic Statistics, Journal of Industrial Economics, Journal of Marketing
Research, Journal of Political Economy, Journal of Public Economics, Journal of Risk and
Uncertainty, Management Science, Marketing Science, Quantitative Economics, RAND
Journal of Economics, Review of Economic Studies, Review of Marketing Science,
Southern Economic Journal, US-Israel Binational Science Foundation.

Session Co-Chair, Triennial Invitational Choice Symposium, 2013, 2016, 2019

INFORMS Marketing Science Doctoral Consortium Faculty 2013, 2015, 2017

Program Committee, Marketing-Industrial Organization Conference, Yale University,
2011, 2013, 2015

Session Organizer, INFORMS Marketing Science Conference, 2011, 2012, 2013, 2014, 2015,
2016, 2017

Session organizer, American Economic Association Meetings

Co-organizer, Conference on Structural Models in Labor, Aging and Health, Duke
University

Program committee, International Public Economic Theory Conference, Duke University

University of Cambridge

- Marketing Faculty Recruiting Committee
- Marketing Group Coordinator for Executive Education Teaching
- Marketing Ph.D. Admissions Committee
- Discussion Panel, Ph.D. Students' Research Lunch

Yale University

- Junior Faculty Recruiting Committee
- Ph.D. Admissions Committee
- Faculty Panel, Yale SOM Alumni Leadership Convocation

Duke University

- Junior Faculty Recruiting Committee

Professional Memberships

- INFORMS Society of Marketing Science
- American Economic Association
- Econometric Society

Selected Conferences and Seminar Presentations

INFORMS Marketing Science Conference,* Marketing Dynamics Conference,* Invitational Triennial Choice Symposium (2013, 2016), SICS-University of California-Berkeley,* UTD-FORMS Conference,* Econometric Society Meetings,* American Economic Association Meetings,* Stanford Institute of Theoretical Economics,* Yale China India Insights Conference (discussant), Four Schools Conference-Columbia University 2012, University of Cambridge, LSE, Dept. of Economics-New York University, Dept. of Economics-Johns Hopkins University, Dept. of Economics-Georgetown University, IO Prospectus Workshop-Yale University, Faculty Seminar-Yale School of Management, IO Workshop-Yale University, FDA Economics of Tobacco Roundtable, Dept. of Economics-University of Georgia, Marketing and Industrial Organization Conference-Yale University 2011 (discussant), NEMC-Harvard Business School 2010, Bureau of Economic Analysis, Carnegie Mellon University-Heinz School, BU-Harvard-MIT Health Economics Seminar, Dept. of Economics-University of Wisconsin-Madison (* indicates multiple times)

Teaching Experience

University of Cambridge

- Marketing (MBA core)
- Building Customer Aligned Organizations (MBA, EMBA, Executive Education)
- Design Thinking (EMBA)
- Strategic Branding 2.0: The Cambridge Approach (Executive Education)

Strategic Marketing Management (Executive Education)
Digital Marketing (Executive Education, Master of Studies)
Stakeholder Centric Innovation (Executive Education)

Yale University

Customer (MBA core, Pre-MBA)
Managing Marketing Programs (MBA elective)
Marketing & Strategy (Global Pre-MBA)
Seminar in Marketing (Ph.D.)

Duke University

Managerial Economics (MBA core)
Market Intelligence (MBA elective)
Health Economics (Ph.D., Undergraduate)

University of Minnesota

Instructor, Mathematics Review Course for incoming Graduate Students
Instructor, Principles of Microeconomics
Teaching Assistant, Principles of Macroeconomics
Guest Lecturer, Principles of Macroeconomics

Student Advising

Ph.D. student advising, Judge Business School, University of Cambridge
Sonal Srivastava

M.Phil student advising, Judge Business School, University of Cambridge
Liang Zhao

Ph.D. student advising, School of Management and Dept. of Economics, Yale University
Doug Chung
Elan Fuld
Navid Mojir
Boudhayan Sen
Beomjoon Shin

Undergraduate Senior Essay Advisor, Department of Economics, Yale University
Dakota Myers
Melody Wang
Frank Wu
Leon Zhang

Ph.D. student advising, Department of Economics, Duke University

Padmaja Ayyagari
Derek Brown
Lijing Ouyang
Justin Trogdon
Martin Salm
Yang Wang

Supervisor, Independent Study, Fuqua School of Business, Duke University

J. Gaverick Matheny
Ziggy Yoediono