Gregory S. Crawford

Business Address

Department of Economics University of Zurich Schöenberggasse 1 CH-8001 Zürich

Email: gregory.crawford@econ.uzh.ch

Phone: +41 (0)44 634 3799

Home Address

Haus Wasserfels Burgrain 37 8706 Meilen Switzerland

Mobile: +41 (0)79 194 6116

Employment

Professor of Applied Microeconomics, Dept. of Economics, University of Zurich, May 2013-present Professor, Department of Economics, University of Warwick, 2008-13

Associate Professor, Department of Economics, University of Arizona, 2008-09 (on leave)

Chief Economist, Federal Communications Commission (FCC), 2007-2008

Assistant Professor, Department of Economics, University of Arizona, 2002-2008

Assistant Professor, Department of Economics, Duke University, 1997-2002

Lecturer, Department of Economics, Duke University, 1996-1997

Visiting Professor, European School of Management and Technology, Berlin, Summer 2007 Visiting Professor, Fuqua School of Business, Duke University, 2000-2001

Education

Ph.D. in Economics, Stanford University, Stanford, CA, 1998 B.A., Economics with Honors, University of Pennsylvania, Philadelphia, PA, 1991

Professional Affiliations

Centre for Economic Policy Research (CEPR)

Co-Director, Industrial Organization Programme, September 2014-present Research Fellow, 2011-current

Institute for Fiscal Studies (IFS)

International Research Fellow, August 2014-present

Mannheim Centre for Competition and Innovation (MaCCI)

Research Fellow, December 2016-present

Association of Competition Economists (ACE)

Steering Committee, January 2016-present

Florence Competition Program in Law and Economics, European

University Institute (EUI), Florence

Scientific Committee, June 2017-present

Centre for Competitive Advantage in the Global Economy (CAGE)

Research Fellow, April 2011-present

Academic Publications

"Quality Overprovision in Cable Television Markets," (with Matthew Shum and Oleksandr Shcherbakov), American Economic Review, v109n3 (March 2019), 956-995.

"Asymmetric Information and Imperfect Competition in Lending Markets," (with Nicola Pavanini and Fabiano Schivardi), *American Economic Review*, v108n7 (July 2018), 1659-1701.

"The Welfare Effects of Vertical Integration in Multichannel Television Markets," (with Robin Lee, Michael Whinston, and Ali Yurukoglu), *Econometrica*, v86n3 (May 2018), 891-954.

"The Economics of Television and Online Video Markets," Chapter 7 in Anderson, S., Waldfogel, J., and D. Stromberg, <u>Handbook of Media Economics</u>, volume 1A, 2016, Elsevier Press.

"Cable Regulation in the Internet Era," Chapter 3 in Rose, N., ed, "Economic Regulation and Its Reform: What Have We Learned?", 2014, University of Chicago Press.

"Accommodating Endogenous Product Choices: A Progress Report," International Journal of Industrial Organization, v30 (2012), 315-320.

"The Welfare Effects of Bundling in Multichannel Television Markets," (with Ali Yurukoglu), American Economic Review, v102n2 (April 2012), 643-685 (lead article).

"Price Discrimination in Service Industries," (with A. Lambrecht, K. Seim, N. Vilcassim, A. Cheema, Y. Chen, K. Hosanger, R. Iyengar, O. Koenigsberg, R. Lee, E. Miravete, and O. Sahin), *Marketing Letters*, v23 (2012), 423-438.

"Economics at the FCC: 2007-2008," (with Evan Kwerel and Jonathan Levy), Review of Industrial Organization, v33n3 (November 2008), 187-210.

"The Discriminatory Incentives to Bundle: The Case of Cable Television," *Quantitative Marketing and Economics*, v6n1 (March 2008), 41-78.

- Winner, 2009 Dick Wittink Prize for the best paper published in the QME

"Bidding Asymmetries in Multi-Unit Auctions: Implications of Bid Function Equilibria in the British Spot Market for Electricity, (with Joseph Crespo and Helen Tauchen), International Journal of Industrial Organization, v25n6 (December 2007), 1233-1268.

"Bundling, Product Choice, and Efficiency: Should Cable Television Networks Be Offered A La Carte?," (with Joseph Cullen), *Information Economics and Policy*, v19n3-4 (October 2007), 379-404.

"Monopoly Quality Degradation and Regulation in Cable Television," (with Matthew Shum), Journal of Law and Economics, v50n1 (February 2007), 181-209.

"Uncertainty and Learning in Pharmaceutical Demand," (with Matthew Shum), Econometrica, v73n4 (July 2005), 1137-1174.

"Recent Advances in Structural Econometric Modeling: Dynamics, Product Positioning, and Entry," (with J.-P. Dube, K. Sudhir, A. Ching, M. Draganska, J. Fox, W. Hartmann, G. Hitsch, B. Viard, M. Villas-Boas, and N. Vilcassim), *Marketing Letters*, v16n2 (July 2005).

"The Impact of the 1992 Cable Act on Household Demand and Welfare," *RAND Journal of Economics*, v31n3 (Autumn 2000), 422-449.

Academic Articles Under Review

"The Regulation of Public Service Broadcasting: Should there be more advertising on television?," (with Lachlan Deer, Jeremy Smith, and Paul Sturgeon), working paper, University of Zurich, July 2017, revise and resubmit at *International Journal of Industrial Organization*.

"Preference estimation with unobserved choice set heterogeneity using sufficient sets," (with Rachel Griffith and Alessandro Iaria), University of Zurich, October 2017, revise and resubmit at *Journal of Econometrics*.

Non-Academic Publications

"Kabuki Dances or Rube Goldberg Machines: Vertical Analysis of Media Mergers," (with Cristina Caffarra and Helen Weeds), Competition Policy Internation (CPI) Antitrust Chronicle, August 2018.

Grants

"Media Bias in Public Service Broadcasting," Swiss National Science Foundation, 505,624 CHF (~\$510,000), 2018-2020.

"Endogenous Product Characteristics in Empirical Industrial Organization," Economic and Social Research Council, £140,000 (~\$220,000), 2010-2012.

"The Empirical Consequences of Advertising Content" (with Jozsef Molnar), Hungarian Competition Commission, 10,000,000 Hungarian Forint (~\$50,000), 2007-2008

External Reports

Authored Commissioned Research Study for the UK Office of Communication (OfCom), "Empirical analysis of BT's automatically renewable contracts," (with ESMT Competition Analysis), August 2010. Also Supplementary Report, February 2011.

Authored Commissioned Research Study for the Hungarian Competition Commission, "The Empirical Consequences of Advertising Content in the Hungarian Mobile Phone Market," (with Jozsef Molnar), March 2008.

Authored Commissioned Research Study for the Federal Communications Commission "Television Station Ownership Structure and the Quantity and Quality of TV Programming," July 2007.

Teaching and Service

Graduate (MSc) Empirical Methods (1^{st} -year MSc Econometrics), 2017-18

Graduate (2^{nd} -year Ph.D.) Industrial Organization, 1996-2005, 2016-17

Graduate (MSc) Cross Section and Panel Data Econometrics, 2015

Graduate (PhD) Structural Estimation in Applied Microeconomics, 2014-15

Graduate (MSc/PhD) Industrial Organization, 2009-10

Graduate (MSc/PhD) Empirical Methods, 2011-12

Undergraduate Business Strategy, 2009-2011

Undergraduate Econometrics, 1998-2004, 2009-2013

MBA Strategy, 2006-2007

Graduate (2nd-year Ph.D.) Industrial Organization, 1996-2005

Graduate (1^{st} -year Ph.D.) Econometrics, 1998-1999

Introductory Microeconomics, 1996-1998

The Economics and Statistics of Sports, 1999

Recruiting Committee, 1997-2002 (Duke), 2003-2004, 2005-2007 (Arizona), 2011-12 (Warwick)

Research Director, 2009-2012 (University of Warwick)

Director of Research Impact, 2012-13 (University of Warwick)

Advising [1st, Current placements]

Lachlan Deer (Zurich), current student

Alessandro Iaria (Warwick, 2014), [CREST (Paris), Bristol (UK)]

Nicola Pavanini (Warwick, 2013), [Zurich Post-Doc, Tilburg]

Joseph Cullen (Arizona, 2008), [WashU (St. Louis), Amazon.com]

Oleksandr Shcherbakov (Arizona, 2008), [Yale Post-Doc, Bank of Canada]

Kivanc Kirgiz (Duke, 2001), [Cornerstone Research]

Jed Brewer, Tim Davies, Lucas Rosnau, Volodymyr Bilotkac,

Yong Cai, Joseph Crespo, Lan Liang, Peter Rankin, Andrew Biehl, Mark Burkey

Julia Cajal-Grossi

Other Professional Activities

Editing/Refereeing

Associate Editor, International Journal of Industrial Organization, October 2005 - present.

Editorial Board, Information Economics and Policy, December 2007 - present.

Excellence in Refereeing Award, American Economic Review, 2009.

Referee for Econometrica, American Economic Review, Review of Economics Studies,
RAND Journal of Economics, Review of Economics and Statistics,
Quantitative Marketing and Economics, National Science Foundation,
International Journal of Industrial Organization, Journal of Industrial Economics,
Journal of Applied Econometrics, Information Economics and Policy,
Management Science, Southern Economic Journal

Keynote Lectures (previous and planned)

"Title TBD," 4th Economics of Media Bias Workshop, (Berlin, 2/19)

- "Vertical Integration in Media and Communication Markets," 2014 Scientific Seminar on the Economics & Policy of Communications and Media Markets, Florence School of Regulation, EUI, (Florence, 3/14)
- "Vertical Integration in Media and Communication Markets," 5th Workshop on the Economics of ICT University of Porto (Porto, Portugal, 3/14)

Academic Presentations (previous 7 years and planned)

- 2016 Presentations: Winter Marketing-Economics Summit (Denver, 1/16), University of Bern (2/16), ESMT (Berlin, 6/16), Pompeu Fabra (Barcelona, 11,16)
- 2015 Presentations: NYC Media Seminar (2/15), Empirical Models of Differentiated Products (IFS, London, 6/15), Advances in the Economics of Antitrust and Consumer Protection (Paris, 9/15), University of Pennsylvania (Wharton, 9/15), 15th Media Economics Workshop (Cape Town, 11/15), Bocconi (12/15), ECARES (Brussels, 12/15)
- 2014 Presentations: Winter Marketing-Economics Summit (Wengen, Switzerland, 1/14), Industrieökonomischer Ausschuss (Hamburg, 2/14), E.CA Competition Law and Economics Expert Forum (Berlin, 3/14), 5th Workshop on the Economics of ICTs (Keynote, Oporto, 3/14), Economics and Policy of Communications and Media Policy Challenges in Digital Markets (Keynote, EUI, Florence, 3/14), University of St. Gallen (4/14), 7th Workshop on Economics of Advertising and Marketing (Vienna, 6/14), University of Zurich Inaugural Lecture (Zurich, 9/14), Toulouse School of Economics (Toulouse, 9/14), DG Competition (Brussels, 10/14), TV, Economics, and Society (WZB, Berlin, 11/14), LSE (12/14), IO of Media and Advertising (NIE, Manchester, UK, 12/14)
- 2013 Presentations: Tilburg University (11/13)
- 2012 Presentations: University of East Anglia / Centre for Competition Policy (5/12), PEDL Inaugural Conference (5/12)
- 2011 Presentations: University of Cyprus (3/11), CREST (Paris, 6/11), EARIE (Stockholm, 9/11), University of Zurich (9/11), University of Mannheim (10/11).

Conference Organization:

CEPR Applied IO Workshop: Leuven, Belgium (KU Leuven, 2018), Jerusalem (Hebrew University, 2017), London (IFS, 2016), Zurich (UZH, 2015)

EARIE 2010-current: Scientific Committee

Economics of Media Markets 2010: Scientific Committee, Triangle Applied

Micro Conference 2000: Organizer, Triangle Applied Micro Conference 1999: Co-organizer

Non-Academic Presentations and Panel Participation (By Topic)

Horizontal and Vertical Integration in Television Markets

- "Media Mergers: Plurality and Vertical Concerns," 2018 Jevons Colloquium: Future Perspectives on Media Markets (Panel, Rome, 5/18)
- "Vertical Media Deals: EU, US, Bargaining Models and a Kabuki Dance...," GCR TMT Conference (Joint with Cristina Caffarra, CRA, Panel, London, 5/18)
- "Liberty/Ziggo and Liberty/DeVijver: Phase II Cable mergers in the Netherlands and Belgium,"
 Association of Competition Economists (ACE, Academic Discussant, Bocconi University, (Milan, 11/15)
- "Horizontal and Vertical Integration in Media and Communication Markets," DG Competition (Brussels, 10/14)
- "Horizontal and Vertical Mergers in TV Markets: A US and European Perspective," 2nd E.CA Competition Law and Economics Expert Forum (Berlin, 3/14)

Mergers and Innovation

- "Innovation and Merger Assessment," GCR Live IP, Antitrust, and Innovation Conference (Brussels, 3/18)
- "Mergers and Innovation: An Empirical View," Association of Competition Economists (ACE) Conference (Madrid, 11/17)

Market Definition

"Market Definition in the Digital Era: (Theoretical and) Measurement Issues," E.CA Expert Forum 2017 (Brussels, 5/17)

Media Plurality

"Media Mergers: Plurality and Vertical Concerns," 2018 Jevons Colloquium: Future Perspectives on Media Markets (Panel, Rome, 5/18)

Selective Distribution and Vertical Restraints

"Selective Distribution and 3rd-Party Platforms: A few questions," CRA Conference on Economic Developments in European Competition Policy (Panel, London, 12/17)

Damages

"Damages Litigation: Issues and Challenges in Complex Antitrust Cases," CRESSE 2016 (Panel, Rhodes, 7/16)

Miscellany

- "The (Empirical) Economics of Television Markets," Workshop on TV, Economics, and Society (WZB, Berlin, 11/14)
- "Understanding 'New Media' and its lessons for non-media industries," University of Zurich Dept. of Economics, Advisory Board Meeting (Zürich, 11/13)
- "How much is too much? A closer look at choice in the entertainment industry," The Future of Broadcasting Conference (London, 6/12)
- "New Media: Economic Perspectives," University of Warwick, Window on Research (Coventry, UK, 6/11)
- "Doing Good with (Good) Econometrics," Warwick Economics Summit, University of Warwick, (Coventry, UK, 2/11)

Last updated: September 2018