### V. BRIAN VIARD

Cheung Kong Graduate School of Business 3/F, Tower E3, Oriental Plaza • 1 East Chang An Avenue • Beijing, China 100738 Tel.: 86-10-8518-8858 • Fax: 86-10-8518-6800 • <u>brianviard@ckgsb.edu.cn</u> <u>http://www.ckgsb.edu.cn/personalsites/brianviard/</u>

### POSITIONS

Associate Professor (with tenure) of Strategy and Economics, Cheung Kong Graduate School of Business, March 2012 to present

Associate Researcher, The University of Hong Kong, September 2020 to present.

Member, Asia Innovation and Entrepreneurship Association, November 2020 to present.

Visiting Associate Professor of Strategy and Economics, The University of Hong Kong, September 2019 to August, 2020.

Visiting Scholar, Stanford Institute for Economic Policy Research, April 2017 to October 2017

Assistant Professor of Strategy and Economics, Cheung Kong Graduate School of Business, July 2007 to February 2012

Visiting Assistant Professor of Strategy and Economics, Yale School of Management, April to May 2009.

Assistant Professor of Strategic Management, Stanford Graduate School of Business, July 2000 to July 2007

Visiting Assistant Professor of Economics, Yale School of Management, July 2005 to July 2006. Fletcher Jones Faculty Scholar, Stanford Graduate School of Business, September 2001 – June 2002

Management Consultant, Deloitte & Touche, 1992-1995

Systems Consultant, Andersen Consulting, 1987-1990

#### **EDUCATION**

Ph.D. Business Economics, University of Chicago Graduate School of Business, August 2000M.B.A., Stanford Graduate School of Business, June 1992B. S. Electrical Engineering, Yale University, May 1987, *cum laude* 

#### **RESEARCH INTERESTS**

Industrial Organization, Applied Microeconomics, Environmental Economics, Economics of Competitive Strategy, Telecommunications

#### FELLOWSHIPS AND AWARDS

Leading Member (Co-Principal Investigator), National Natural Science Foundation of China "Transboundary Environmental Pollution: Policy Design and Evaluation", Grant #72173105 (Principal Investigator Shihe Fu, Xiamen University).

Business School Research with Social Impact, Financial Times, 2020.

Inaugural recipient of the "MBA Best Teaching Award" at Cheung Kong Graduate School of Business, 2009.

NET Institute Research Grant, Summer 2003

Fletcher Jones Faculty Scholar, 2001-2002

State Farm Companies Foundation Doctoral Dissertation Award, 1999-2000 Oscar Mayer Fellowship, 1999-2000 University of Chicago GSB Fellowship, 1995-1999

## PUBLICATIONS

- "A Mayor's Perspective on Tackling Air Pollution," (with Shihe Fu) invited chapter in C.K.Y. Leung (Ed.). *Handbook of Real Estate and Macroeconomics* (413 – 437). Edward Elgar Publishing Ltd.
- "Trans-Boundary Air Pollution Spillovers: Physical Transport and Economic Costs by Distance" (with Shihe Fu and Peng Zhang) *Journal of Development Economics*, Vol. 155, 102808, March 2022.
- "Air Quality and Manufacturing Firm Productivity: Nationwide Estimates for China," (joint with Shihe Fu and Peng Zhang), *The Economic Journal*, Vol. 131, 3241 3273, November 2021.
- "Commute Costs and Labor Supply: Evidence from a Satellite Campus," (with Shihe Fu) *Journal of Economic Geography*, Vol. 19, No. 3, 723 752, May 2019.
- "The Effect of Beijing's Driving Restrictions on Pollution and Economic Activity," (lead author with Shihe Fu) *Journal of Public Economics*, Vol. 125, 98 115, May 2015 (cited in "Business School Research with Social Impact," *Financial Times*, 2020.
- "Bayesian Estimation of Nonlinear Equilibrium Models with Random Coefficients," (lead author with Anne Gron and Nicholas Polson) *Applied Stochastic Models in Business and Industry*, Vol. 31, No. 4, 435 456, July/August 2015.
- "The Effect of Content on Global Internet Adoption and the Global 'Digital Divide,"" (lead author with Nicholas Economides) – *Management Science*, Vol. 61, No. 3, 665 – 687, March 2015.
- "The Effect of Market Structure on Cellular Technology Adoption and Pricing" (with Katja Seim) *American Economic Journal: Microeconomics*, Vol. 3, No. 2, 221-251, May 2011.
- "Quantifying the Benefits of Entry into Local Phone Service," (with Nicholas Economides and Katja Seim) *The RAND Journal of Economics*, Vol. 39, No. 3, 699 730, Autumn 2008.
- "Do Frequency Reward Programs Create Switching Costs?," (with Wesley Hartmann) *Quantitative Marketing and Economics*, Vol. 6, No. 2, 109 137 (lead article), June 2008.
- "Do Switching Costs Make Markets More or Less Competitive?: The Case of 800-Number Portability" *The RAND Journal of Economics*, Vol. 38, No. 1, 146 163, Spring 2007.
- "Information Goods Upgrades: Theory and Evidence" *The B.E. Journal of Theoretical Economics*, Vol. 7, Issue 1 (Contributions), Article 3, 2007.
- "Recent Advances in Structural Econometric Modeling: Dynamics, Product Positioning and Entry," (with Jean-Pierre Dube, K. Sudhir, Andrew Chiang, Greg Crawford, Michaela Draganska, Jeremy Fox, Wesley Hartmann, Gunter Hitsch, Miguel Villas-Boas, and Naufel Vilcassim) – invited in *Marketing Letters*, Vol. 16, Issue 3 – 4, December 2005, 209 – 224.
- "Pricing of Complements and Network Effects" (with Nicholas Economides) in *Regulation* and the Economic Performance of Communication and Information Networks, edited by Gary Madden, Edward Elgar, 2011.

## UNPUBLISHED PAPERS

- "The Dynamic Role of Subnational Regions in Firm Performance," (with Haibing Shu) submitted.
- "Evaluating Air Pollution Regulation: Separating Firm Competitiveness and Ambient Effects," (with Guanglai Zhang, Ning Zhang, and Peng Zhang).

## WORK IN PROGRESS

- "Competition and Broadband Internet Adoption" (with Nicholas Economides and Katja Seim).
- "Quantity-Based Price Discrimination using Frequency Reward Programs," (with Xing Li).
- "Bargaining for Access Rates in International Long Distance."

# OTHER PUBLICATIONS

- "Countering Supplier Power: Can an Employee be Too Good?," Forbes India, June 15, 2016.
- "Market Entry: To Boldly Go where Others Have Gone Before," South China Morning Post (Education Post), April 21, 2016.
- "Price Wars and Why Companies Just Can't Get Along," *South China Morning Post (Education Post)*, January 28, 2016.
- "Externalities and Minding Other People's Business," Forbes India, October 9, 2015.
- "Alibaba, Tencent and Walled Gardens: History Repeats Itself on the Chinese Web," *South China Morning Post*, June 26, 2015.
- "China's Salt Monopoly: Cracking Down on Illegal Contraband," *Forbes Asia*, August 4, 2014.
- "A Physically-Based Navigation Strategy for Sonar-Guided Vehicles" (with Roman Kuc). *The International Journal of Robotics Research*, 10, 1991.

# PUBLICATIONS IN CHINESE

- "An Intentional Misprint," *Journal of Translation from Foreign Literature of Economics*, 2020 (2), 84-85. 有意设置的"打印故障《经济资料译丛》2020 年第 2 期, 84-85.
- "Keep Your Customers Happy but Disorganized to Prevent Buyer Power," Journal of Translation from Foreign Literature of Economics, 2018 (1), 72-73. 避免买家力量的形成——让 顾客满意但又无组织,《经济资料译丛》2018 年第 1 期, 72-73.
- "Countering Supplier Power: Can an Employee be too Good?" *Journal of Translation from Foreign Literature of Economics*, 2017 (4), 75 – 76. 员工太好非好事:如何制衡供应商的议价能力?《经济资料译丛》2017 年第 4 期, 75-76。
- "Not Just Another Day in the Park?" *Journal of Translation from Foreign Literature of Economics*, 2017 (3), 58 59. 万达游乐园能否打败迪士尼乐园? 《经济资料译丛》2017 年第 3 期, 58-59。
- "Who Benefits from Alibaba's Singles Day?" Journal of Translation from Foreign Literature of *Economics*, 2017 (2), 70 71. 谁从阿里巴巴光棍节中获利? 《经济资料译丛》2017 年第 2期, 70-71。
- "Price Wars and Why Companies Just Can't Get Along," Journal of Translation from Foreign Literature of Economics, 2017 (1), 54 – 55. 价格战与为何公司间不能友好相处? 《经济资 料译丛》2017 年第1期, 54-55。

- "Creating Customer Value is Not Enough," *Journal of Translation from Foreign Literature of Economics*, 2016 (4), 40 42. 不能止步于创造客户价值, 《经济资料译丛》2016 年第 4 期, 40-42。
- "Alibaba, Tencent, and Walled Gardens: History Repeats Itself," *Journal of Translation from Foreign Literature of Economics*, 2016 (4), 9 – 10. 阿里巴巴、腾讯和围墙花园:历史重演, 《经济资料译丛》2016年第3期, 40-42。
- "Holding Up an Airline," Journal of Translation from Foreign Literature of Economics, 2015 (4), 66 67. 航空公司的"套牢"难题,《经济资料译丛》2016年第2期, 66-67。
- "Box Office Sales: It's All a Matter of Timing," Journal of Translation from Foreign Literature of Economics, 2015 (4), 83 84. 电影票房收益: 排片博弈(下),《经济资料译丛》2016 年第1期, 83-84。
- "China Film Group and the Art of Playing Favorites in China's Movie Market," *Journal of Translation from Foreign Literature of Economics*, 2015 (4), 57 59. 中国电影集团的"优待艺术",《经济资料译丛》2015 年第 4 期, 57-59。
- "Putting a Price on Pollution?," *Fortune China*, December 12, 2015. 中国应如何征收环境污染税? 《财富》(中文版)2015年12月14日。
- "Putting a Price on Pollution?," Journal of Translation from Foreign Literature of Economics, 2015 (3), 54 5. 中国的污染税: 对污染进行定价, 《经济资料译丛》2015年第3期, 54 55。
- "Should China Tax Liquor More?," Fortune China, August 28, 2015. 中国是否该提高酒税
  ? 《财富》(中文版)2015年8月28日。
- "Should China Tax Liquor More?," *Journal of Translation from Foreign Literature of Economics*, 2015 (2), 85 86. 中国的酒税应该更高点吗? 《经济资料译丛》2015 年第 2 期, 85 86。
- "China Film Group and the Art of Playing Favorites in China's Movie Market," Fortune China, August 19, 2015. 中国电影市场: "偏心眼"的艺术? 《财富》(中文版)2015年8 月 19日。
- "When Your Bank Interest is a Basketful of Vegetables," *Fortune China*, January 27, 2015. 储 蓄送礼的经济学根源. 《财富》(中文版)2015年1月27日。
- "When Your Bank Interest is a Basketful of Vegetables," *Journal of Translation from Foreign Literature of Economics*, 2015 (1), 77 – 78. 当银行利息变成一篮子蔬菜时,《经济资料译 丛》2015 年第1期,77-78。
- "Railroaded? The Logic Behind Merging Two Chinese Train Manufacturers," Fortune China, December 7, 2014. 北车和南车合并背后的逻辑.《财富》(中文版) 2014年12月07日。
- "Learning from Market Entry: Keep Your Entrants Imaginary," Fortune China, November 5, 2014. 总有一股力量在引导新进入者进入市场,作为行业的现有从业者,你如何确保自己不会被取代?《财富》(中文版)2014年11月05日。
- "Holding Up an Airline," Fortune China, July 11, 2014. 如何为中国飞行员"解套"《财富》 (中文版) 2014年 07月 11日。
- "Restrictions on New Car Purchases: An Economist's Road Trip," Journal of Translation from Foreign Literature of Economics, 2014 (4), 82 – 83. 新车限购令: 经济学家的分析, 《经济 资料译丛》2014 年第 4 期, 即将出版, 82 – 83。

- "Mobile Apps that Move Cabs," Journal of Translation from Foreign Literature of Economics, 2014 (3), 48-49.手机打车软件能帮乘客打车吗? 《经济资料译丛》2014 年第 3 期, 48-49。
- "What is the Price of a Good Education at Chinese Universities? It Depends on Your Interests," *Journal of Translation from Foreign Literature of Economics*, 2014 (2), 92 – 93. 中国大学 良好教育的价格是多少? ——取决于你的兴趣,《经济资料译丛》2014 年第 2 期, 92-93。
- "Tackling Excess Capacity in Industry: The Race Not Yet Run," *Journal of Translation from Foreign Literature of Economics*, 2014 (1), 99 – 100. 解决产能过剩问题: 竞赛尚未开始,《经 济资料译丛》2014 年第1期, 99-100。
- "Giving Credit Where it is Due: A Key Innovation Incentive," *Journal of Translation from Foreign Literature of Economics*, 2013 (4), 81 – 83. 论功行赏: 一个重要的创新激励,《经 济资料译丛》2013 年第 4 期, 81-83。
- "Getting Beijing's Taxis To Move, Not Sit," *Journal of Translation from Foreign Literature of Economics*, 2013 (3), 58 59. 北京出租车,如何才能不空驶?,《经济资料译丛》2013 年第3期,58-59。
- "Pork Barrel Politics," Journal of Translation from Foreign Literature of Economics, 2013 (2), 51 52.
  "武钢"为何进入养猪业?,《经济资料译丛》2013年第2期, 51-52。

# PUBLICATIONS IN KOREAN

• "아시아 케이스 스터디: 블리자드의 중국 파트너 교체" ("Asia Case Study: Blizzard Choosing a Local Partner in China"), *Dong-A Business Review*, July 2014, Issue 2, No. 157, 94 – 100.

# TEACHING EXPERIENCE

MBA Strategy Courses:

- "Competitive Strategy" (CKGSB MBA): June 2009, May 2010, March-May 2011, and May/June 2012.
- "Applied Game Theory" (CKGSB MBA): April 2010.
- "E-Commerce Strategy" (Yale): April/May 2009.
- "Business Strategy" (CKGSB MBA): January 2008.
- "Strategy in Information Goods Markets" (Stanford): Spring 2004 (newly-designed course), Spring 2005, Spring 2007.
- "Competitive Strategy" (Yale): Fall 2005.
- "Strategy and Organization in the Global Economy" (Stanford): Spring 2001, Spring 2002, Winter 2003, core course coordinator in Winter 2003.

# MBA Economics Courses:

- "Managerial Economics" (CKGSB MBA): November 2007 (newly designed course), November/December 2008, November/December 2009, November/December 2010, November/December 2011, October-December 2012, September-November 2013, September-November 2014, September-November 2015, September-November 2016, November – December 2017, January 2018, January 2019, March-April 2021.
- "Management Economics" (CKGSB Finance MBA): November 2009 (Beijing), November 2010 (Beijing), June/July 2011 (Beijing), June 2012 (Shanghai), July 2012 (Beijing), December

2012 (Shenzhen), June 2013 (Beijing), June/July 2013 (Shanghai), November/December 2013 (Shenzhen), June 2014 (Beijing), July 2014 (Shanghai), November/December 2014 (Shenzhen), May/June 2015 (Beijing), June/July 2015 (Shanghai), November 2015 (Shenzhen), May/June 2016 (Beijing), July 2016 (Shanghai), November 2016 (Shenzhen), November 2017 (Beijing), November 2017 (Shenzhen), January 2018 (Shenzhen), March 2018 (Shenzhen), March 2018 (Shenzhen), March 2018 (Shenzhen), January 2019 (Shanghai), April 2021 (Shenzhen).

### EMBA Economics Courses:

• "Managerial Economics" (CKGSB-IMD Dual EMBA): June 2015 (Beijing) (newly designed course), June 2016 (Shenzhen).

### Ph.D. Economics Courses:

• "Economics of Strategy and Organizations" (Stanford): Spring 2003, Winter 2004, Winter 2005, Winter 2007.

# PROFESSIONAL ACTIVITIES

- Referee for American Economic Review, Journal of Political Economy, RAND Journal of Economics, National Science Foundation, American Economic Journal, Management Science, Journal of Public Economics, Economic Journal, Journal of Labor Economics, Journal of Industrial Economics, Journal of the Association of Environmental and Resource Economists, Journal of Economics & Management Strategy, Quantitative Marketing and Economics, Journal of Environmental Economics and Management, Journal of Health Economics, International Journal of Industrial Organization, Marketing Science, Review of Industrial Organization, China Economic Review, Journal of Business, Journal of Marketing Research, Research Policy, Telecommunications Policy, Journal of Applied Econometrics, Resource and Energy Economics, Journal of Sports Economics, Southern Economic Journal, Canadian Journal of Economics, Economic Inquiry, The B.E. Journals in Economic Analysis & Policy, Transportation Research Part A: Policy and Practice, Transportation Research Part B: Methodological, Transportation Research Part D: Transport and Environment, Scandinavian Journal of Economics, International Journal of Research in Marketing, NET Institute, Review of Network Economics, Naval Research Logistics, Journal of Environmental Management, Information, Industrial and Corporate Change, Contemporary Economic Policy, Empirical Economics, Economics and Policy, Journal of Industry, Competition and Trade, International Journal of Sustainable Transportation, American Law and Economics Review, Natural Hazards, and Social Sciences and Humanities Research Council of Canada.
- Organized the Stanford 2002 Conference on Strategic Management, Stanford, California.
- Co-organized the Applied Microeconomics Seminar, Stanford Graduate School of Business, Fall 2000, Spring 2001, Fall 2001, Spring 2002, Fall 2002, Spring 2003, Winter 2004.

## PUBLISHED CASE STUDIES

- "The Battle for China's Carbonated Beverage Industry" (supervised Christopher Hildner). Cheung Kong GSB Case #2012-02-1-232-2 (A) #2012-02-1-233-2 (B), and # 2012-09-1-244-2e (C), 2012. Available through CKGSB Case Center.
- "99Bill" (supervised Arar Han). Cheung Kong GSB Case #2011-09-1-214-1e (A) and #2011-09-1-215-1e (B), 2011. Available through CKGSB Case Center.
- "Blizzard Feels the Heat in China: Choosing a Local Partner for *World of Warcraft*" (supervised Richard Bethune). Cheung Kong GSB Case #2011-09-1-190-2e (A) and #2011-09-1-195-2e (B), 2011. Available through CKGSB Case Center.

- "Baidu: Searching for Truth?" (supervised Arthur Chengchun Qi). Cheung Kong GSB Case #2010-09-1-177-2e (A), #2010-09-1-179-2e (B), and #2010-09-1-189-2e (C), 2010. Available through CKGSB Case Center.
- "Gushan and the Biodiesel Market" (supervised Yunfei Feng). Cheung Kong GSB Case #2010-09-1-173-1e (A) and #2010-09-1-174-1e (B), 2010. Available through CKGSB Case Center.
- "Third-Party Payment Systems in China" (with Arar Han). Cheung Kong GSB Case #2010-09-1-163-1e, 2010. Available through CKGSB Case Center.
- "The Instant Messaging Battle: New Enemies and Widening Conflict." Cheung Kong GSB Case #2010-09-1-162-1e, 2010. Available through CKGSB Case Center.
- "Blizzard v. bnetd.org: Managing Intellectual Property" (supervised Pamela Yatsko). Stanford GSB Cases #SM-154 (A) and (B), 2007. Available through Harvard Business School Publishing.
- "ezboard: Making Customers Pay" (supervised Pamela Yatsko). Stanford GSB Case #SM-142, 2005. Available through Harvard Business School Publishing.
- "The Long Battle for an Instant Messaging Standard" (supervised Steven Fan). Stanford GSB Case #SM-138, 2005. Available through Harvard Business School Publishing.
- "Netflix: Opening or Closing Credits in Online Movie Distribution?" (supervised Jessica Phillips Patrick). Stanford GSB Case #SM-131, 2004. Available through Stanford GSB.
- "Tata Consultancy Services: Globalization of Software Services" (with Sanjeev Dheer and John Roberts). Stanford GSB case #S-SM-18, 1993. Available through Harvard Business School Publishing.
- "EDS: Information Technology Outsourcing" (with Sanjeev Dheer and Garth Saloner). Stanford GSB case #S-SM-3, 1992. Reprinted in *Strategic Management of Technology and Innovation*, Robert A. Burgelman, Modesto A. Maidique and Steven C. Wheelwright, Irwin, 2<sup>nd</sup> edition, 1996.

# POLICY CONSULTING

• Worked on filing for Federal Communications Commission, Notice of Proposed Rulemaking, "In the Matter of Preserving the Open Internet," GN Docket No. 09-1914.