CURRICULUM VITAE

(September 2016)

Jay Pil Choi

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Education

Harvard University Ph.D. in Economics, 1990

Seoul National University M.A. Program in Economics, 1982-1983 B.A. in Economics, Magna cum Laude, 1982

Employment and Teaching Experience

University Distinguished Professor, Michigan State University, 2011-Scientia Professor, University of New South Wales, 2011-2014 Professor, University of New South Wales, 2010 Professor, Michigan State University, 2000-2011 Associate Professor, Seoul National University, 1999-2000 Associate Professor, Columbia University, 1996-1999 Assistant Professor, Columbia University, 1990-1996

Courses Taught

Gruaduate Topics Course in Industrial Organization Graduate Industrial Organization Graduate Core Microeconomics (Game Theory and Information Economics) Graduate Advanced Microeconomic Theory Graduate Mathematics for Economics Undergraduate Intermediate Microeconomics Microeconomics for International Affairs Undergraduate Game Theory Undergraduate Industrial Organization Undergraduate Microeconomics Seminar Undergraduate Industrial Organization Seminar Undergraduate Industrial Organization Seminar Undergraduate International Trade Senior Seminar on Economics of the Internet and E-Commerce Senior Seminar on Economics of Innovation and IPR

Visiting/ Other Appointments

Distinguished Visiting Professor, Hitotsubashi Institute of Advanced Study, May-August 2015 and September 2016-May 2017.

President, Korea-America Economics Association, 2014

Visiting Professor, Yonsei University, 2009-.

Visiting Professor, Institute for the Study of Competition and Regulation and School of Economics and Finance, Victoria University of Wellington, New Zealand, June-July 2008.

Visiting Professor, Technical University of Dresden, Germany, December 2006.

Visiting Professor, Institute for Advanced Study, Wuhan University, China, November 2006.

Visiting Professor (University of New South Wales) and Visiting Fellow of the Australian Research Council Economic Design Network, Summer 2005.

Visitor, University of Mannheim, July 2004.

Visiting Professor, Graduate School of Management, Korea Advanced Institute of Science and Technology, Summer 2002 and Summer 2003.

CESifo Research Network Fellow, 1999-

Post-Doctoral Fellow, Center for Economic Research, The Netherlands, 1993-1994

Visiting Research Fellow, Center for Economic Studies, University of Munich, Germany, May 1995 and June 1998-August 1998, August 2001

Visiting Research Fellow, Institute for Advanced Studies, Vienna, Austria, June 1995-July 1995

Visiting Research Fellow, Center for Economic Research, The Netherlands, July 1996-August 1996

Visiting Foreign Scholar, Institute of Social and Economic Research, Osaka University, Japan, May 1997-August 1997

Awards, Honors, and Grants

ARC Discovery Grant (AUD 450,000), 2014-2016 (relinquished)

ARC Discovery Grant (AUD 288,000 with A. Ghosh and H. Morita), 2012-2014

Cho Rakkyo Prize, 2014

Dasan Economist Award, 2014

Maekyung-KAEA Economist Award, 2011

Public Utility Research Prize for the Best Paper in Regulatory Economics Awarded at 7th International Industrial Organization Conference, 2009

Microsoft Grants, 2004, 2006, 2007, 2008, 2010, 2013, 2016

Net Institute Grants, 2003, 2005, 2006, 2007, 2008, 2013

Tae-Sung Kim Memorial Prize awarded by the Korean Econometric Society, 1999

Elected as Fellow of International Journal of Industrial Organization, 1997

Social Science Research Council Abe Fellowship, 1996-1997

Columbia University Council for Research in the Social Sciences Fellowship, 1992-1993

Korea Foundation for Advanced Studies Graduate Fellowship, 1983-1990

Korea Foundation for Advanced Studies Junior Fellowship, 1979-1982

Books Edited

Recent Developments in Antitrust: Theory and Evidence, MIT Press, 2007.

Competition Law and Economics: Beyond Monopoly Regulation, Edward Elgar Publishing, forthcoming (with S. Lee and W. Lim)

<u>Published Papers</u> (in reverse chronological order)

- "A Theory of Patent Portfolios," *American Economic Journal: Microeconomics*, forthcoming (with Heiko Gerlach).
- "Group Contests with Internal Conflict and Power Asymmetry," *Scandinavian Journal of Economics*, forthcoming (with Subhasish Modak Chowdhury and Jaesoo Kim).

"FRAND Royalties and Injunctions for Standard Essential Patents," Global

Economic Review, forthcoming.

- "Vertical Foreclosure with Investments," *Research in Economics*, forthcoming (with S. Yi).
- "Merger Simulation in an Open Economy," *Hitotsubashi Journal of Economics*, forthcoming (with JaeNahm).
- "Monitoring Externality, Cross Subsidy and Universal Banking," *International Journal of Industrial Organization*, November 2015, pp. 48-55 (with C. Stefanadis).
- "Patent Pools, Litigation and Innovation," *Rand Journal of Economics*, 2015, pp. 499-523 (with Heiko Gerlach).
- "Net Neutrality, Business Models and Internet Interconnection" *American Economic Journal: Microeconomics*, 2015, pp. 104-141 (with Doh-Shin Jeon and Byung-Cheol Kim).
- "Optimal Compatibility in Systems Markets," *Games and Economic Behavior*, 2015, pp. 106-118 (with Sanghyun Kim).
- "Cartels and Collusion Economic Theory and Experimental Economics," in Roger D. Blair and D. Dainel Sokol (eds.), *Oxford Handbook on International Antitrust Economics*, Oxford University Press, 2015, pp. 415-441 (with Heiko Gerlach).
- "Selection Biases in Complementary R&D Projects," *Journal of Economics and Management Strategy*, Winter 2014., pp. 899-924 (with Heiko Gerlach).
- "Multi-Market Contacts and Antitrust Enforcement," *Journal of Industrial Economics*, December 2013, pp. 987-1022 (with Heiko Gerlach).
- "Local Identity and the Persistent Leadership in Market Share Dynamics: Evidence from Deregulation in the Korean Soju Industry," *Korean Economic Review*, Winter 2013, pp. 267-304 (with Seung-Hyun Hong and Seonghoon Jeon).
- "Antitrust Enforcement in Relation to Exploitative Conduct," *SERI Quarterly*, October 2013, pp. 48-55.
- "N-Sided Markets," in David J. Teece and Mie Augier (eds.), *The Palgrave Encyclopedia of Strategic Management*, Macmillan, 2013.
- "Bundling Information Goods," in M. Peitz and J. Waldfogel (eds.), *Oxford Handbook of the Digital Economy*, Oxford University Press, 2012, pp. 273-305.

"Global Cartels, Leniency Programs, and International Antitrust Cooperation,"

International Journal of Industrial Organization, November 2012, pp. 528-540 (with Heiko Gerlach).

- "International Antitrust Enforcement and Multi-Market Contact," *International Economic Review*, May 2012, pp. 635-658 (with Heiko Gerlach).
- "Internet Security, Vulnerability Disclosure, and Software Provision," (with C. Fershtman and N. Gandal), *Journal of Industrial Economics*, December 2010, pp. 868-894.
- "Compulsory Licensing as an Antitrust Remedy," *The WIPO Journal*, 2010, pp. 74-82.
- "Product Announcement and Reputation in a Cheap Talk Game," *Journal of Economic Theory and Econometrics*, December 2010, pp. 59-78.
- "Net Neutrality and Investment Incentives," *Rand Journal of Economics*, Autunm 2010, pp. 446-471 (with Byungcheol Kim).
- "Tying in Two-Sided Markets with Multi-Homing," *Journal of Industrial Economics*, September 2010, pp. 607-626.
- "Strategic Incentives to Share Customer Information: Substitutes or Complements?" *Journal of Economics and Management Strategy*, 2010, pp. 403-433 (with Byungcheol Kim).
- "Vaporware," *International Economic Review*, August 2010, pp. 653-669 (with E. G. Kristiansen and J. Nahm).
- "Patent Pools and Cross Licensing in the Shadow of Patent Litigation," *International Economic Review*, May 2010, pp. 441-460.
- "The Economics of Politically-Connected Firms," *International Tax and Public Finance*, October 2009, pp. 605-620.
- "Alternative Damage Rules and Probabilistic Intellectual Property Rights: Unjust Enrichment, Lost Profits and Reasonable Royalty Remedies," *Information Economics and Policy*, June 2009, pp. 145-157.
- "Merger with Bundling in Complementary Markets," *Journal of Industrial Economics*, September 2008, pp. 553-577.
- "The Economics and Politics of International Merger Enforcement: A Case Study of GE/Honeywell Merger," in V. Ghosal and J. Stennek (eds.), *The Political Economy of Antitrust*, North-Holland, 2007, pp. 241-258.
- "The Optimal Number of Firms with an Application to Professional Sports Leagues," *Journal of Sports Economics*, Febraury 2007, pp. 99-108 (with S. Bae).

- "Bundling, Entry Deterrence, and Specialist Innovators," *Journal of Business*, 2006, Vol. 79, No. 5, pp. 2575-2594 (with C. Stefanadis).
- "A Model of Piracy," *Information Economics and Policy*, Vol. 18, No. 3, September 2006, pp. 303-320 (with S. Bae).
- "Broadcast Competition and Advertising with Free Entry: Subscription vs. Free-to-Air," *Information Economics and Policy*, Vol. 18, No. 2, June 2006, pp. 181-196.
- "Antitrust Analysis of Tying Arrangements," in J. P. Choi (ed.), *Recent Developments in Antitrust: Theory and Evidence*, MIT Press, 2006, pp. 61-90.
- "Corruption and the Shadow Economy," *International Economic Review*, August 2005, pp. 817-836 (with M. Thum), reprinted in Friedrich Schneider, ed., *The Economics of the Hidden Economy*, Edward Elgar Publishing, 2008.
- "Live and Let Live: A Tale of Weak Patents," *Journal of European Economic Association*, April-May 2005, pp. 724-733.
- "An Economic Analysis of Product Pre-Announcements," *CESifo Economic Studies*, 2005, pp. 301-321 (with E.G. Kristiansen and J. Nahm), reprinted in G. Illing and M. Peitz (eds.), *Understanding the Digital Economy*, MIT Press.
- "The Economics of Repeated Extortion," *Rand Journal of Economics*, Summer 2004, pp. 203-223 (with M. Thum).
- "Strategic Second Sourcing by Multinationals," *International Economic Review*, May 2004, pp. 579-600 (with C. Davidson).
- "Tying and Innovation: A Dynamic Analysis of Tying Arrangements," *Economic Journal*, , January 2004, pp. 83-101.
- "Bundling New Products with Old to Signal Quality, with Application to the Sequencing of New Products," *International Journal of Industrial Organization*, vol. 21, October 2003, pp. 1179-1200.
- "The Effects of Integration on R&D Incentives in Systems Markets," *Netnomics*, Special Issue on the Microeconomics of the New Economy, May 2003 (with G. Lee and C. Stefanadis).
- "The Dynamics of Corruption with the Ratchet Effect," *Journal of Public Economics*, vol. 87, 2003, pp. 427-443 (with M. Thum).
- "A Dynamic Analysis of Licensing: The 'Boomerang' Effect and Grant-Back Clauses," *International Economic Review*, August 2002, pp. 803-829.

- "Planned Obsolescence as a Signal of Quality," *International Economic Journal*, Winter 2001, pp. 59-79.
- "A Theory of Mixed Bundling Applied to the GE-Honeywell Merger," *Antitrust*, Fall 2001, pp. 32-33.
- "Protectionist Response to Import Competition in Declining Industries Reconsidered," *European Journal of Political Economy*, 2001, pp. 193-201.
- "Tying, Investment, and the Dynamic Leverage Theory," *Rand Journal of Economics*, Spring 2001, pp. 52-71 (with C. Stefanadis), reprinted in Justin Johnson and Michael Waldman, eds., *Pricing Tactics, Strategies, and Outcomes*, Edward Elgar Publishing, 2007.
- "Technology Transfer with Moral Hazard," *International Journal of Industrial Organization*, 2001, pp. 249-266.
- "Vertical Foreclosure with the Choice of Input Specifications," *Rand Journal of Economics*, Winter 2000, pp. 717-743 (with S. Yi).
- "Patent Litigation as an Information Transmission Mechanism," *American Economic Review*, December 1998, pp. 1249-1263.
- "Brand Extension as Informational Leverage," *Review of Economic Studies*, October 1998, pp. 655-670.
- "Market Structure and the Timing of Technology Adoption with Network Externalities," *European Economic Review*, February 1998, pp. 225-244 (with M. Thum).
- "Information Concealment in the Theory of Vertical Integration," *Journal of Economic Behavior and Organization*, 1998, 117-131.
- "Herd Behavior, the "Penguin Effect", and the Suppression of Informational Diffusion: An Analysis of Informational Externalities and Payoff Interdependency," *Rand Journal of Economics*, Autumn 1997, pp. 407-425.
- "The Provision of (Two-Way) Converters in the Transition Process to a New Incompatible Technology," *Journal of Industrial Economics*, June 1997, pp. 139-154.
- "Preemptive R&D, Rent Dissipation and the 'Leverage Theory'," *Quarterly Journal of Economics*, November 1996, pp. 1153-1181.
- "Do Converters Facilitate the Transition to a New Incompatible Technology?: A Dynamic Analysis of Converters," *International Journal of Industrial Organization*, October 1996, pp. 825-835.

- "Standardization and Experimentation: Ex Ante versus Ex Post Standardization," *European Journal of Political Economy*, 1996, pp. 273-290.
- "A Rationale for Quota Protection: A Political Economy Approach," *Eastern Economic Journal*, Fall 1996, pp. 421-424.
- "Optimal Tariffs and the Choice of Technology: Discriminatory Tariffs vs. the 'Most Favored Nation' Clause," *Journal of International Economics*, January 1995, pp. 143-160.
- "Irreversible Choice of Uncertain Technologies with Network Externalities," *Rand Journal of Economics*, Autumn 1994, pp.382-401.
- "Network Externality, Compatibility Choice, and Planned Obsolescence," *Journal of Industrial Economics*, June 1994, pp.167-182.
- "Making Sense of Inefficient Intrafirm Transactions: A Signaling Approach," *International Journal of Industrial Organization*, 1994, pp.495-508.
- "Cooperative R&D with Product Market Competition", *International Journal of Industrial Organization*, December 1993, pp.553-571.
- "Dynamic R&D Competition, Research Line Diversity, and Intellectual Property Rights," *Journal of Economics and Management Strategy*, Summer 1993, pp. 277-298.
- "Cooperative R&D with Moral Hazard," *Economics Letters*, 1992, pp. 485-491.
- "Dynamic R&D Competition under "Hazard Rate" Uncertainty," *Rand Journal of Economics*, Winter 1991, pp.596-610.
- "Market Structure, Incentive to Patent and the Pace of Innovation," *Economics Letters*, 1990, pp.277-283.

Unpublished Papers

- "Asymmetric Neutrality Regulation and Innovation at the Edges: Fixed vs. Mobile Networks," revised and resubmitted for *Journal of Industrial Economics* (with D. S. Jeon and B. C. Kim).
- "Strategic Product Pre-Announcements in Markets with Network Effects," under revision for *International Journal of Industrial Organization*, (with E. G. Kristiansen and J. Nahm).
- "Exclusive Dealing and Free Riding," under revision for *Journal of Industrial Economics* (with C. Stefanadis).

"Communication of Soft Information to Investors: Credibility and Reputation," under

submission (with E. G. Kristiansen and J. Nahm).

- "A Model of Patent Trolls," under submission, September 2015 (with Heiko Gerlach).
- "You Are Judged by the Company You Keep: Reputation Leverage in Vertically Related Markets," under submission, March 2015 (with Mrtin Peitz)
- "A Leverage Theory of Tying in Two-Sided Markets," March 2016 (with D. Jeon).
- "Vertical Learning Alliances and Partial Equity Ownership in the Presence of Performance Spillovers," January 2014 (with A. Ghosh, H. Morita and S. Niu).
- "International Cooperation and Convergence in Competition Policy," April 2011.
- "Incompetence Implies Loyalty," December 2007 (with Marcel Thum).
- "A Leverage Theory of Reputation Building with Co-Branding: Complementarity in Reputation Building," March 2007 (with Doh-Shin Jeon).
- "Financial Conglomerates, Informational Leverage, and Innovation: The Investment Banking Connection," (with C. Stefanadis), November 2002.
- "Assigning Spectrum Rights for IMT-2000 in Korea: Has the Time for Auction Come?," 1999.
- "Telecommunications Reform in Central and Eastern Europe," Institute for Advance Studies East European Series No. 28, September 1995.
- "Bundling and Entry Deterrence," mimeo., May 1993.
- "A Strategic Use of Licensing to Deter Entry," mimeo., November 1990 (with S. Yi).
- "Tacit Collusion under Correlated Demand Uncertainty," mimeo., October 1990.

Miscellaneous

"Up or Down: A Male Economist's Manifesto on the Toilet Seat Etiquette," *Economic Inquiry*, 2011, pp. 303-309.

Book Reviews

Takatoshi Ito and Anne O. Krueger, eds. *Governance, Regulation, and Privatization in the Asia-Pacific Region*, in *Economic Development and Cultural Change*, July 2005, pp. 987-989.

Published Books in Korean

- [1] *A Case Study of the US PCS Spectrum Auction*, Korea Telecommunications Research Institute, 2000 (with Y. Chun and S. Yi).
- [2] *Survey of Auction Theories*, Korea Telecommunications Research Institute, 2000 (with Y. Chun, H. Kim and S. Yi).
- [3] *Antitrust Policy and Government Regulation for Information Industries*, Institute of Information Technology Assessment Report, 2000.
- [4] *R&D Incentives in Systems Markets*, KISDI Report, 1999 (with K. Lee).

Book Chapters in Korean

"Recent Studies on the Anticompetitive Effects of Vertical Integration," (with S. Yi) in *Government and Economy*, edited by Kwang Choi, Seoul: Si-sa-yeong-o-sa, 1996, 281-303 (in Korean).

Conference Organization

Co-Organzer for the 2nd ATE Symposium on Antitrust Economics and Competition Policy, UNSW (December 15-16, 2014) Scientific Commiteee for the EARIE 2011, 2012, 2103, 2014. Co-Organizer for the UNSW International Trade and Industrial Organization Workshop (August 2-3, 2011) Program Committee for the 2009 Summer Workshop on Industrial Organization and Management Strategy (June 16-17, 2009) Program Committee for the 7th Annual International Industrial Organization Conference (April 2-5, 2008) Program Committee for the 2008 Summer Workshop on Industrial Organization and Management Strategy (July 18-19, 2008) Program Committee for the 6th Annual International Industrial Organization Conference (May 16-18, 2008) Program Co-Chair for Midwest Economic Theory Meeting (April 28-30, 2006) Program Committee for the 2002 North American Econometric Society Meeting **Editorial Board** Co-Editor, International Economic Journal, 2016-

Co-Editor, International Journal of Industrial Organization, 2005-2013
Editorial Board, Information Economics and Policy, 2008Guest Editor, Special Volume on Big Media, Information Economics and Policy, 2015.
Board of Editors, Seoul Journal of Economics
Editorial Board, Internaltional Telecommunications Policy Review, 2009Editorial Board, Journal of the Korean Econometric Society, 2007-

Associate Editor, *e-conomics*, 2007-Associate Editor, *European Economic Review*, 2002-2005 Editorial Board, *International Economic Journal*, 1999-2003 Editorial Board, *The International Journal of IT Standards & Standardization Research*, 2002-2003