Takanori Ida

Professor (FY 2007 ~ Present), Dean (FY 2021 ~ 2023), Ph.D. (Economics) Graduate School of Economics, Kyoto University,

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Self-Introduction:

Born in Niigata Prefecture of Japan in 1965, I graduated from the Faculty of Economics, Kyoto University in 1989 and received Ph.D. in Economics in 1997 from Kyoto University. I am currently Professor of the Graduate School of Economics of Kyoto University. I have been a visiting scholar at the University of Illinois, the University of Cambridge, and the University of California. I specialize in applied microeconomics and applied empirical economics. My research interests include behavioural economics, field experiments, causal inference, and machine learning. My publications include Broadband Economics: Lessons from Japan (Routledge), Smart Grid Economics (Yuhikaku), Broadband Economics (Nikkei Publishing Inc.). I have received the Japan Society for the Promotion of Science (JSPS) Award, the Yahoo Paper Award from the Japanese Association for Behavioural Economics, the Japan Society for Applied Economics (JSAE) Award, the Okawa Foundation Publication Award, the DoCoMo Mobile Science Incentive Award, and others.

Recently Selected Papers:

- [1] Ito, K., T. Ida, and M. Tanaka (2023) "Selection on Welfare Gains: Experimental Evidence from Electricity Plan Choice," *American Economic Review* vol.113.11: 2937–2973.
- [2] Murakami, K., H. Shimada, Y. Ushifusa, and T. Ida (2022) "Heterogeneous Treatment Effects of Nudge and Rebate: Causal Machine Learning in a Field Experiment on Electricity Conservation," *International Economic Review* vol.63.4: 1779-1803.
- [3] Wang, W., T. Ida, and H. Shimada (2020) "Default Effect versus Active Decision: Evidence from a Field Experiment in Los Alamos," *European Economic Review* vol.128: 1-20.
- [4] Ito, K., T. Ida, M. Tanaka (2018) "Moral Suasion and Economic Incentives: Field Experimental Evidence from Energy Demand," *American Economic Journal: Economic Policy* vol. 10.1: 240-267.

Education:

1990 – 1995 Kyoto University, Graduate School of Economics, Kyoto, Japan

M.A. degree in Economics, March 1992

Doctoral degree in Economics, January 1997

(Ph.D. thesis: Essays on Decision Theory under Uncertainty)

1985 - 1989 <u>Kyoto University, Faculty of Economics</u>, Kyoto, Japan

B.A. degree in Economics, March 1989

Work Experience: Permanent

Permanent	
2000 - Present	Kyoto University, Graduate School of Economics, Kyoto, Japan
	Associate Professor, April 2000 – March 2007
	Professor, April 2007 – Present
	Vice Dean, April 2015 – March 2017
	Dean, April 2021 – March 2024
2012 - 2014	Kyoto University, Society-Academia Collaboration for Innovation,
	Kyoto, Japan
	Vice Director, December 2012 – September 2014
1995 - 2000	Konan University, Faculty of Economics, Kobe, Japan
	Assistant Professor, April 1995 – March 1997
	Associate Professor, April 1997 – March 2000
Visiting	
2011-2012	University of California, Berkeley, Goldman School of Public Policy,
	Berkeley, U.S.A.
	Lawrence Berkeley National Laboratory, Demand Response Research
	Center, Berkeley, U.S.A.
	Fulbright Visiting Scholar, August 2011 – July 2012
2005	University of Cambridge, Wolfson College, Cambridge, U.K.
	Visiting Scholar, July – September 2005
2001 - 2002	University of Cambridge, Department of Applied Economics and
	Wolfson College, Cambridge, U.K.
	Visiting Scholar, July 2001 – July 2002
1997 - 1998	University of Illinois at Urbana-Champaign, Department of Economics,
	Illinois, U.S.A
	Visiting Scholar, August 1997 – August 1998

Awards:

Λ	Awaius.		
•	May 2025	The Author Service Award, Springer Nature	
•	May 2025	The Editorial Contribution Award, Springer Nature	
•	April 2025	Research Distinguished Professor, Graduate School of Economics, Kyoto University	
•	June 2024	Best Paper Award, Information and Communication Society of Japan	
•	June 2022	Best Paper Award, Information and Communication Society of Japan	
•	November 2019	2nd Yahoo Best Paper Award, Behavioral Economics Society of Japan	
•	2014	Japan Association of Building and Equipment Engineers (JABMEE)	
	Environmental Tech	nvironmental Technology Excellence Award,	
•	September 2011	The Fulbright Grantee (Visiting Scholar)	

March 2010 The JSPS (Japan Society for the Promotion of Science) Awards • November 2007 The Japan Association for Applied Economics Prize

• November 2007 The Okawa Publications Prize

• October 2007 The DoCoMo Mobile Science Prize for the Young Researchers

• June 2002 The Japan Society of Public Utility Economics Prize for Young Researchers

• September 1990 The TELECOM Social Science Award for Student

Book (written in English):

- [1] Ida, T., K. Ito, and M. Tanaka (2024) *Smart Grid Economics: A Field Experimental Approach to Demand Response*, Springer Nature, 139pp.
- [2] Ida, T. (2009) *Broadband Economics: Lessons from Japan*, Routledge (Taylor & Francis Group): London, 290pp, January 2009.

Refereed Articles (written in English):

- [1] Kinoshita, K., M. Sato, and T. Ida (2024) "Bayesian Probability Revision and Infection Prevention Behavior in Japan: A Quantitative Analysis of the First Wave of COVID-19," *Research in Economics* vol.78.4:.
- [2] Carnerero, D., T. Tanaka1, M. Li, T. Hatanaka, Y. Wasa, K. Hirata, Y. Ushifusa, and T. Ida (2024) "Net-Zero Energy House-oriented Linear Programming for the Sizing Problem of Photovoltaic Panels and Batteries," *IEEE Access* vol. 12: 80429-80441.
- [3] Kawamura, T., T. Ida, and K. Ogawa (2024) "Synergy between Monetary and Non-Monetary Interventions: Experimental Evidence on Crowdfunding Techniques for R&D in New Energy Sources," *Applied Economics* April: 1–15.
- [4] Ito, K., T. Ida, and M. Tanaka (2023) "Selection on Welfare Gains: Experimental Evidence from Electricity Plan Choice," *American Economic Review* vol.113.11: 2937–2973.
- [5] Nakamura, N. and T. Ida (2023) "Delineating zero-price markets with network effects: An analysis of free messenger services," *Journal of Competition Law & Economics* vol.19.1: 177–192.
- [6] Murakami, K., H. Shimada, Y. Ushifusa, and T. Ida (2022) "Heterogeneous Treatment Effects of Nudge and Rebate: Causal Machine Learning in a Field Experiment on Electricity Conservation," *International Economic Review* vol.63.4: 1779-1803.
- [7] Ishihara, T. and T. Ida (2022) "The Effect of Information Provision on Stated and Revealed Preferences: A Field Experiment on the Choice of Power Tariffs Before and After Japanese Retail Electricity Liberalization," *Environmental and Resource Economics* vol.82.3: 573-599.
- [8] Wang, W., T. Ida, and H. Shimada (2020) "Default Effect versus Active Decision: Evidence from a Field Experiment in Los Alamos," *European Economic Review* vol.128: 1-20.
- [9] Ida, T., N. Motegi, and Y. Ushifusa (2019) "Behavioral Study of Personalized Automated Demand Response in Workplaces," *Energy Policy* vol.132: 1009-1016.

- [10] Kuroda, T., T. Koguchi, and Ida, T. (2019) "Identifying the Effect of Mobile Operating Systems on the Mobile Services Market," *Information Economics and Policy* vol. 46: 86-95.
- [11] Ito, K., T. Ida, M. Tanaka (2018) "Moral Suasion and Economic Incentives: Field Experimental Evidence from Energy Demand," *American Economic Journal: Economic Policy* vol. 10.1: 240-267.
- [12] Fukuzawa, N. and T. Ida (2016) "Science Linkages between Scientific Articles and Patents for Leading Scientists in the Life and Medical Sciences Field: The Case of Japan," *Scientometrics* vol. 106.2: 629-644.
- [13] Ida, T., K. Murakami, and M. Tanaka (2016) "Electricity Demand Response in Japan: Experimental Evidence from a Residential Photovoltaic Generation System," *Economics of Energy & Environmental Policy* vol. 5.1: 73-88.
- [14] Murakami, K., T. Ida, M. Tanaka, and L. Friedman (2015) "Consumers' Willingness to Pay for Renewable and Nuclear Energy: A Comparative Analysis between the US and Japan," *Energy Economics* vol. 50: 178-189.
- [15] Ogawa, K. and T. Ida (2015) "Power of Individual Characteristics in Hypothetical Dictator Game Experiments," *Review of Social Economy* vol. 73.2: 176–195.
- [16] Pilar Baquero Forero, M.d., T. Ida, and T. Kuroda (2015) "Institutions and Cultural Heterogeneity as Determinants of National Income: A Random-coefficients Stochastic Frontier Model," *Review of Development Economics* vol. 19.3: 710-724.
- [17] Ida, T., K. Takemura, and M, Sato (2014) "Inner Conflict between Nuclear Power Generation and Electricity Rates: A Japanese Case Study," *Energy Economics* vol.48: 61-69.
- [18] Tanaka, T., T. Ida. K. Murakami, and L. Friedman (2014) "Consumers' Willingness To Pay for Alternative Fuel Vehicles: A Comparative Analysis between US and Japan," *Transportation Research A* vol.70: 194-209.
- [19] Ida, T., K. Murakami, and M. Tanaka (2014) "A Stated Preference Analysis of Smart Meters, Photovoltaic Generation, and Electric Vehicles in Japan: Implications for Penetration and GHG Reduction" *Energy Research & Social Science* vol.2: 75-89.
- [20] Ida, T. (2014) "A Quasi-Hyperbolic Discounting Approach To Smoking Behavior," *Health Economics Review* vol.4.5: 1-11.
- [21] Tanaka, M. and T. Ida (2013) "Voluntary Electricity Conservation of Households after the Great East Japan Earthquake: A Stated Preference Analysis," *Energy Economics* vol.39: 296-304.
- [22] Ida, T. and N. Fukuzawa (2013) "Effects of Large-Scale Research Funding Programs: A Japanese Case Study," *Scientometrics* vol. 94.3: 1253-1273.
- [23] Ida, T. and K. Ogawa (2012) "Measuring the Inequality Aversion Rate, the Social Discount Rate, and the Time Discount Rate Using a Hypothetical Dictator Game," *International Journal of Social Economics* vol.39.5: 314-329.
- [24] Ida, T. (2012) "Beyond Mobile Number Portability: Measuring Consumer Preferences for Service Portability in Japan's Mobile Phone Market," *Applied Economics* vol.44.26: 3357-3369.
- [25] Goto, R., Y. Takahashi, and T. Ida (2011) "Changes of Smokers' Attitudes to Intended Cessation Attempts in Japan," *Value in Health* vol.14.5: 785-791.
- [26] Ida, T., R. Goto, Y. Takahashi, and S. Nishimura (2011) "Can Economic-Psychological

- Parameters Predict Successful Smoking Cessation?," *Journal of Socio-Economics* vol.40.3 285-295.
- [27] Watanabe, N., R. Nakajima, and T. Ida (2010) "Quality-Adjusted Prices of Japanese Mobile Phone Handsets and Carriers' Strategies," *Review of Industrial Organization* vol.36.4: 391-412.
- [28] Ida, T. (2010) "Coevolution of Product Quality and Consumer Preferences," *Journal of Bioeconomics* vol.12.2: 101-117.
- [29] Ida, T. (2010) "Anomaly, Impulsivity, and Addiction," *Journal of Socio-Economics* vol.39.2: 194-203.
- [30] Ida, T. and R. Goto (2009) "Interdependency among Addictive Behaviors and Time/Risk Preferences: Discrete Choice Model Analysis of Smoking, Drinking, and Gambling," *Journal of Economic Psychology* vol.30.4: 608-621.
- [31] Goto, R., Y. Takahashi, S. Nishimura, and T. Ida (2009) "A Cohort Study to Examine Whether Time and Risk Preference Is Related to the Smoking Cessation Success," *Addiction* vol.104.6: 1018-1024.
- [32] Ida, T. and R. Goto (2009) "Simultaneous Measurement of Time and Risk Preferences: Stated Preference Discrete Choice Modeling Analysis Depending on Smoking Behavior," *International Economic Review* vol.50.4: 1169-1182.
- [33] Ida, T. and T. Kuroda (2009) "Discrete Choice Model Analysis of Demand for Mobile Telephone Service in Japan," *Empirical Economics* vol.36.1: 65-80.
- [34] Ida, T. and K. Sakahira (2008) "Broadband Migration and Lock-in Effects: Mixed Logit Model Analysis of Japan's High-speed Internet Access Service," *Telecommunications Policy* vol. 32.9: 615-625.
- [35] Ida, T. and Y. Horiguchi (2008) "Consumer Benefits of Public Services over FTTH in Japan: Comparative Analysis of Provincial and Urban Areas by Using Discrete Choice Experiment," *Information Society* vol.24.1: 1-17.
- [36] Ida, T. and M. Anbashi (2008) "Analysis of Vertical Separation of Regulator under Adverse Selection," *Journal of Economics* vol.93.1: 1-29.
- [37] Ida, T., S. Kinoshita, and M. Sato (2008) "Conjoint Analysis of Demand for IP Telephony: The Case of Japan," *Applied Economics* vol.40.10: 1279 1287.
- [38] Goto, R., S. Nishimura, and T. Ida (2007) "Discrete Choice Experiment of Smoking Cessation Behaviour in Japan," *Tobacco Control* vol.16.5: 336-343.
- [39] Ida, T., E. Itoh, and S. Kinoshita (2007) "Post-regulatory Reform Productivity Gains in Japan's Electricity Industry," *Applied Economics Letters* vol.14.13: 975 979.
- [40] Ida, T. and T. Kuroda (2006) "Discrete Choice Analysis of Demand for Broadband in Japan," *Journal of Regulatory Economics* vol.29.1: 5-22.
- [41] Ida, T. (2005) "Analysis of Internet Topology with a Three-Components Model," *Managerial and Decision Economics* vol.26.8: 527-534.
- [42] Ida, T. and S. Asai (2005) "The Regional Cost Gap of the Japanese Local Telecommunications Services," *Papers in Regional Science* vol.84.2: 183-199.
- [43] Ida, T. (2004) "Bottleneck Monopolies and Network Externalities in Network Industries," *Evolutionary and Institutional Economics Review* vol.1.1: 85-105.

- [44] Ida, T. and T. Kuwahara (2004) "Regulatory Reform of Japan's Electric Power Industry: Economies of Scale-and-Scope and Yardstick Competition," *Asian Economic Journal* vol.18.4: 423-438.
- [45] Ida, T. and M. Suda (2004) "The Cost Structure of the Japanese Railway Industry: The Economies of Scale and Scope and the Regional Gap of the Japan Railway after the Privatization," *International Journal of Transport Economics* vol.31.1: 23-37.

Papers under Review (written in English):

- [1] Tanaka, K., Y. Kurakawa, T. Ishihara, K. Akao, and T. Ida (2021) "Moral utility or Moral Tax? Experimental Study of Electricity Conservation by Social Comparison," Submitted.
- [2] Ida, T., T. Ishihara, K. Ito, D. Kido, T. Kitagawa, S. Sakaguchi, and S. Sasaki (2022) "Choosing Who Chooses: Selection-Driven Targeting in Energy Rebate Programs," conditionally accepted at *Econometrica*.
- [3] Sato, M., S. Kinoshita, T Ida (2023) "Subjective Risk Valuation and Behavioral Change: Evidence from COVID-19 in the U.K. and Japan," Submitted.
- [4] Ishihara, T., T. Tomizuka, R. Goto, T. Ida (2024) "Nudging Physical Activity: A Randomized Controlled Field Experiment," Submitted.
- [5] Ida, T. and R. Okui (2025) "Can information alleviate overconfidence? A randomized experiment on financial market predictions," Submitted.

Book Chapter Articles (written in English):

- [1] Ida, T. and Y. Ushifusa (2024) "Behavioral Economics and Its Applications for Energy Consumption," *Present and Future of Evolutionary Economics: Japanese Perspectives*, Springer: 169-183.
- [2] Ida, T., Y. Ushifusa, K. Tanaka, K. Murakami, and T. Ishihara (2020) "Behavioral Study of Demand Response: Web-Based Survey, Field Experiment, and Laboratory Experiment," *Economically Enabled Energy Management*, Springer: 117-151.
- [3] Ida, T. and R. Goto (2016) "Simultaneous Measurement of Time and Risk Preferences: Stated Preference Discrete Choice Modeling Analysis Depending on Smoking Behavior," S. Ikeda, H. Kato, F. Ohtake, and Y. Tsutui (eds.) *Behavioral Economics of Preferences, Choices, and Happiness*, Springer: 27-48 (Reprint of Ida, T. and R. Goto (2009) "Simultaneous Measurement of Time and Risk Preferences: Stated Preference Discrete Choice Modeling Analysis Depending on Smoking Behavior," *International Economic Review* vol.50.4: 1169-1182).
- [4] Ida, T. and R. Goto (2016) "Interdependency Among Addictive Behaviours and Time/Risk Preferences: Discrete Choice Model Analysis of Smoking, Drinking, and Gambling," S. Ikeda, H. Kato, F. Ohtake, and Y. Tsutui (eds.) *Behavioral Economics of Preferences, Choices, and Happiness*, Springer: 153-178 (Reprint of Ida, T. and R. Goto (2009) "Interdependency among Addictive Behaviors and Time/Risk Preferences: Discrete Choice Model Analysis of Smoking, Drinking, and Gambling," *Journal of Economic Psychology* vol.30.4: 608-621).

- [5] Ida, T. (2006) "Broadband, Information Society, and National System in Japan," M. Fransman (ed.), *Global Broadband Battles*, Stanford University Press: 65-86.
- [6] Ida, T. (2006) "The Broadband Market in Japan," R. Taplin and M. Wakui (eds.), *Japanese Telecommunications Market and Policy in Transition*, Routledge: 37-64.
- [7] Ida, T. and M. Ueda (2004) "The Interconnection and Pricing of the Internet," M. Kagami, M. Tsuji, and E. Giovannetti (eds.), *Information Technology Policy and the Digital Divide*, Edwards Elgar: 282-302 (Reprint of Ida, T. and M. Ueda (2002) "The Interconnection and Pricing of the Internet," M. Kagami and M. Tsuji (eds.), *Digital Divide or Digital Jump: Beyond IT Revolution*, IDE-JETRO: 168-190).

Other Selected Academic Articles (written in English):

- [1] Ida, T., T. Ishihara, K. Ito, D. Kido, T. Kitagawa, S. Sakaguchi, and S. Sasaki (2023) "Choosing Who Chooses: Selection-Driven Targeting in Energy Rebate Programs," presented at the Annual National Bureau of Economic Research Summer Institute, Public Economics, Cambridge, Massachusetts, USA, July 25, 2023.
- [2] Ida, T., T. Ishihara, K. Ito, D. Kido, T. Kitagawa, S. Sakaguchi, and S. Sasaki (2022) "Choosing Who Chooses: Selection-Driven Targeting in Energy Rebate Programs," 2022 Asian Meeting of the Econometric Society in East and South-East Asia, Tokyo, Japan, 10th August 2022.
- [3] Ida, T., K. Kawaguchi, T. Kuroda, and S. Sato (2022) "Multi-Product Quality Competition and Bundling: The Case of Telecommunication Industry," ITS 31st European Conference 2022, Gothenburg, Sweden, 20th 21st June 2022.
- [4] Ida, T., T. Ishihara, K. Ito, D. Kido, T. Kitagawa, S. Sakaguchi, and S. Sasaki (2022) "Paternalism, Autonomy, or Both? Experimental Evidence from Energy Saving Programs," International Association of Applied Econometrics 2022, London, UK, June 21-24, 2022.
- [5] Ida, T., T. Ishihara, K. Ito, D. Kido, T. Kitagawa, S. Sakaguchi, and S. Sasaki (2022) "Paternalism, Autonomy, or Both? Experimental Evidence from Energy Saving Programs," North American Summer Meetings of the Econometric Society, Miami, Florida, USA, June 16-19, 2022.
- [6] Ida, T., Ishihara, T., Ito, K., Kido, D., Kitagawa, T., Sakaguchi, S., & Sasaki, S. (2022) "Paternalism, Autonomy, or Both? Experimental Evidence from Energy Saving Programs," 2022 Virtual Asia Pacific ESA Meeting March 16, 2022.
- [7] Ida, T., Ishihara, T., Ito, K., Kido, D., Kitagawa, T., Sakaguchi, S., & Sasaki, S. (2021) "Paternalism, Autonomy, or Both? Experimental Evidence from Energy Saving Programs," Berkeley Energy Camp October 5, 2021.
- [8] Murakami, K., H. Shimada, Y. Ushifusa, and T. Ida (2021) "Heterogeneous Treatment Effects of Nudge and Rebate: Causal Machine Learning in a Field Experiment on Electricity Conservation," The 26th Annual Conference of the European Association of Environmental and Resource Economists June 23, 2021.
- [9] Ida, T. (2019) "Smart Grid Economics: The Evidence-based Policy Created through Field Experiments, Behavioral Economics, and Big Data," International Choice Modelling Conference, Kobe, Japan, August 20, 2019.
- [10] Ito, K., T. Ida, and M. Tanaka (2017) "Information Frictions, Inertia, and Selection on Elasticity:

- A Field Experiment on Electricity Tariff Choice," presented at the NBER Japan Project Meeting, Tokyo, Japan, July 31, 2017.
- [11] Ito, K., T. Ida, and M. Tanaka (2017) "Information Frictions, Inertia, and Selection on Elasticity: A Field Experiment on Electricity Tariff Choice," presented at the Honoring Dan McFadden's 80th birthday Conference, Los Angeles, Califonia, USA, July 28, 2017.
- [12] Ida, T., N. Motegi, and Y. Ushifusa (2017) "Behavioral Study of Personalized Automated Demand Response in Workplaces," presented at the 23rd Annual Conference of the European Association of Environmental and Resource Economists, Athens, Greece, June 28 July 1, 2017.
- [13] Kuroda, T., T. Koguchi, and T. Ida (2017) "Identifying the Effect of Mobile Operating Systems on the Mobile Services Market," presented at the 14th International Telecommunications Society (ITS) Asia-Pacific Conference, Kyoto, Japan, June 24-27.
- [14] Ida, T., N. Motegi, and Y. Ushifusa (2017) "Behavioral Study of Personalized Automated Demand Response in Workplaces," presented at the JST-NSF-RCN Workshop on Distributed Energy Management Systems, Tokyo, Japan, June 12, 2017.
- [15] Ito, K., T. Ida, and M. Tanaka (2017) "Information Frictions, Inertia, and Selection on Elasticity: A Field Experiment on Electricity Tariff Choice," presented at the Midwest Economics Associations, Cincinnati, Ohio, USA, March 30, 2017.
- [16] Ito, K., T. Ida, and M. Tanaka (2017) "Information Frictions, Inertia, and Selection on Elasticity: A Field Experiment on Electricity Tariff Choice," presented at *the Allied Social Science Associations / American Economic Association, Chicago, Illinois, USA, January 7, 2017.*
- [17] Ito, K., T. Ida, and M. Tanaka (2016) "Information Frictions, Inertia, and Selection on Elasticity: A Field Experiment on Electricity Tariff Choice," presented at *Advances with Field Experiments* 2016, Chicago, Illinois, USA, September 15, 2016.
- [18] Ito, K., T. Ida, and M. Tanaka (2016) "Information Frictions, Inertia, and Selection on Elasticity: A Field Experiment on Electricity Tariff Choice," presented at the 39th Annual National Bureau of Economic Research Summer Institute, Environmental & Energy Economics, Cambridge, Massachusetts, USA, July 26, 2016.
- [19] Kuroda, T, Koguchi, T., and T Ida (2015) "An empirical analysis of consumers' concerns about privacy through using the internet," presented at the 2015 Regional Conference of the International Telecommunications Society (ITS), Los Angeles, California, USA, October 25-28, 2015.
- [20] Koguchi, T., T Kuroda, and T Ida (2015)"The impact of asymmetric regulation on product bundling: The case of fixed broadband and mobile communications in Japan," presented at the 2015 Regional Conference of the International Telecommunications Society (ITS), Los Angeles, California, USA, October 25-28, 2015.
- [21] Ida, T. (2015) "The Demand Response in the 4 Japanese Smart Communities and their Results," presented at *Experimenting Smart Communities in Europe and Japan: From Eco-District to Smart Cities: Which Role for Mobility?, Lyon, France, September 16-17, 2015.*
- [22] Ida, T. and W. Wang (2015) "A Field Experiment on Dynamic Electricity Pricing in Los Alamos: Opt-in Versus Opt-out," presented at Association of Environmental and Resource

- Economists (AERE) 4th Annual Summer Conference, San Diego, California, USA, June 3-5, 2015.
- [23] Ito, K., T. Ida, and M. Tanaka (2015) "Using Dynamic Electricity Pricing to Address Energy Crises: Evidence from Randomized Field Experiments," presented at *the Allied Social Science Associations / American Economic Association, Boston, Massachusetts, USA, January 5, 2015.*
- [24] Ida, T. and W. Wang (2014) "Field Experiment on Dynamic Electricity Pricing in Los Alamos," presented at the 6th International Conference on Integration of Renewable and Distributed Energy Resources (IRED), Kyoto, Japan, November 21, 2014.
- [25] Ida, T., K. Ito, and M. Tanaka (2014) "Conservation Request, Dynamic Pricing and Energy Saving Behavior: Social experiment of Kyoto," presented at *the 1st Behavior, Energy & Climate Change Conference BECC JAPAN 2014, Tokyo, Japan, September 16, 2014.*
- [26] Ida, T. and W. Wang (2014) "Field Experiment on Dynamic Electricity Pricing in Los Alamos," presented at the Smart Community Japan 2014, Tokyo, Japan, June 19, 2014.
- [27] Ida, T. (2013) "Demand Response Field Experiments in Economics," presented at the U.S.-Japan Collaborative Smart Grid Project Collective Research Workshop 2013, Santa Ana Pueblo, New Mexico, USA, December 4, 2013.
- [28] Ito, K., T. Ida, and M. Tanaka (2013) "Using Dynamic Electricity Pricing to Address Energy Crises: Evidence from Randomized Field Experiments," presented at the 36th Annual National Bureau of Economic Research Summer Institute, Environmental & Energy Economics, Cambridge, Massachusetts, USA, July 22, 2013.
- [29] Ida, T., K. Ito, and M. Tanaka (2013) "How Do Consumers Respond to Dynamic Pricing? Experimental Evidence of Variable Critical Peak Electricity Pricing in Japan," presented at the 18th Annual POWER Conference on Energy Research and Policy, Berkeley, California, USA, March 22, 2013.
- [30] Ida, T., K. Murakami, and M. Tanaka (2012) "Keys to Smart Home Diffusion: A Stated Preference Analysis of Smart Meters, Photovoltaic Generation, and Electric/Hybrid Vehicles," presented at the 19th Annual Conference of the European Association of Environmental and Resource Economists, Prague, Czech Republic, June 30, 2012.
- [31] Ida, T., M. Tanaka, and K. Murakami (2011) "Forecasting the Diffusion of Smart Meters, Photovoltaic Generation, and Electric Vehicles in Japan: A Stated Preference Approach," *Proceedings at the 33rd Annual APPAM Research Conference, Washington D.C., USA, November 3, 2011.*
- [32] Ida, T. and T. Kuroda (2011) "Optimum Pricing Strategy for Fixed-line Internet and Mobile Phone Services: A Two-sided Market Approach," *Empirical Economics Letters* vol.10.8.
- [33] Ida, T. and T. Kuroda (2010) "Considering Fixed-Mobile Convergence Service as a Two-Sided Market" *Proceedings at the 18th Biennial Conference of the International Telecommunications, Tokyo, Japan, June 27-30, 2010.*
- [34] Ida, T. and K. Sakahira (2010) "Estimating Interdependencies between Japan's Broadband and Mobile Phone Subscriptions," *Empirical Economics Letters* vol.9.11: 1009-1016.
- [35] Ida, T. and M. Sato (2007) "Conjoint Analysis of Consumer Preferences for Broadband Services in Japan," *Kyoto Economic Review* vol.75.2: 115-126.

- [36] Ida, T. and T. Kuroda (2005) "Demands for Broadband Access to Internet: A Lesson from Japan," *Proceedings at European Communications Policy Research* (EURO CPR) 2005.
- [37] Ida, T. (2002) "Price Discrimination and Universal Service," *Kyoto University Economic Review* vol.150/151: 43-64.
- [38] Ida, T. (2000)"Dynamic Model of Health Investment: Theoretical and Empirical Analysis of the Influence of Risks over Time and Age on Medical Expenditure," *Probabilistic Safety Assessment and Management* vol. 5.3: 2069-2075.

Discussion Papers (written in English):

- [1] Iwamoto, R., T. Ishihara, and T. Ida (2025) "Comparing Risk Preferences and Loss Aversion in Humans and AI: A Persona-Based Approach with Fine-Tuning," Kyoto University Graduate School Discussion Paper Series No. E-25-006.
- [2] Ida, T., T. Ishihara, K. Ito, D. Kido, T. Kitagawa, S. Sakaguchi, and S. Sasaki (2024) "Dynamic Targeting: Experimental Evidence from Energy Rebate Programs," NBER Working Paper Series 32561.
- [3] Sato, M., S. Kinoshita, T Ida (2023) "Subjective Risk Valuation and Behavioral Change: Evidence from COVID-19 in the U.K. and Japan," Kyoto University Graduate School Discussion Paper Series No. E-22-011.
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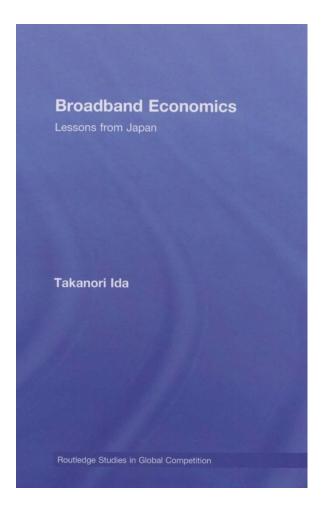
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Japan's high-speed Internet access services such as ADSL, CATV Internet and FTTH are considered the cheapest and fastest state-of-the-art services drawing international attention. In this book, the author introduces the current status of broadband services in Japan and their recent development in competition policy. An econometric model is proposed and discussed to analyse access demand. The purpose of the analysis is to understand quantitively the current status of the rapidly developing Japanese broadband services while providing an academic and practical basis for conceiving prospective competition policies. The book is composed of three parts. The first part introduces the diffusion of current Broadband services, the economics of network industries and related econometric model analysis. The second part elucidates in detail the development of fixedline broadband services, IP phone services as well as mobile phone services. The third part consequently investigates the migration among broadband services, the fixed and mobile convergence and the digital divide problem.

Advances in Japanese Business and Economics 32

Takanori Ida Makoto Tanaka Koichiro Ito

Smart Grid Economics

A Field Experimental Approach to Demand Response



This book aims to report on a cutting-edge research project of the smart grid in Japan, resting on the three pillars of field experiments, behavioral economics, and big data. The field experiments on the smart grid were conducted in four regions in Japan—Yokohama city, Toyota city, Keihanna Science City, and Kitakyushu city—over a three-year period from 2012 to 2014 after the Great East Japan Earthquake on March 11, 2011, and the subsequent accident at the Fukushima Nuclear Power Plants. Our focus here is on demand response in the smart grid environment, which we also discuss in the context of power system reforms. The book is intended for undergraduate and graduate students, researchers, policy makers, and business leaders.