Takeaki Sunada | Curriculum Vitae

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Education

University of Pennsylvania   **Philadelphia, PA**
Ph.D, Economics   *2013–2019 (Expected)*

○ Advisor: Aviv Nevo, Committee: Katja Seim, Eric Bradlow

University of Tokyo   **Tokyo, Japan**
M.S, Economics   *2013*

○ Dissertation: *Advertising Competition in a Mixed Oligopoly*
○ Advisor: Toshihiro Matsumura

International Christian University   **Tokyo, Japan**
B.A. Economics   *2011*

○ Dissertation: *Welfare Evaluation of Japan Airlines' Bankruptcy and Subsequent Route Withdrawals* (in Japanese)
○ Advisor: Naohiro Yashiro

Research Interests

- Quantitative marketing
- Econometric modeling
- Industrial organization
- Information goods
- Product design

Refereed Publications

1. "Advertising Competition in a Mixed Oligopoly", with Toshihiro Matsumura, *Economics Letters* 119 (2013), p 183-185.

Working Papers

1. "Customer Learning and Revenue Maximizing Trial Design" (Job market paper)
2. "Campaign Spending in U.S. House Elections", with Kei Kawai

Awards and Honors

2013-2018: Scholarship awarded by The Nakajima Foundation ($180,000)

2011: Takayama Award for the Best Undergraduate Dissertation

Teaching Experience

The Wharton School, University of Pennsylvania

Graduate Teaching Assistant for Aviv Nevo

- Courses: Pricing Policy (MBA), 2016-2017
- Responsibilities: Regular office hours, creation of a solution manual for assignments, grading

International Christian University

Graduate Teaching Assistant for Akira Ogawa

- Courses:
  - Intermediate Microeconomics I (Undergraduate), 2011
  - Intermediate Microeconomics II (Undergraduate), 2011-2013
  - Introduction of Mathematics to Economics (Undergraduate), 2011
- Responsibilities: Weekly recitations, regular office hours, grading

International Christian University

Graduate Teaching Assistant for Tatsuo Hatta

- Courses: Contemporary Japanese Economy (Undergraduate), 2012
- Responsibilities: Regular office hours, grading

Research Experience

Department of Economics, University of Pennsylvania

Graduate Research Assistant for Hanming Fang and Andrew Shephard   2014

- Responsibilities: Proving propositions

The Wharton School, University of Pennsylvania

Graduate Research Assistant for Joseph Harrington   2017-Present

- Responsibilities: Proofreading articles, literature review, data source finding

Ad-hoc referee for: Review of Industrial Organization

Computer skills

Proficient: Matlab, Stata, R, LaTeX, Excel

Languages

Japanese: Native

English: Proficient

Doctoral Coursework

- Microeconomic Theory I: Steven Matthews, Andrew Postlewaite
- Microeconomic Theory II: George Mailath, Mallesh Pai
- Econometrics I: Frank Schorfheide, Xu Chen
- Econometrics II: Francis Diebold
- Econometrics III: Petra Todd
- Macroeconomic Theory I: Dirk Krueger, Jesus Fernandez-Villaverde
- Macroeconomic Theory II: Jeremy Greenwood, Harold Cole
- Topics in Applied Microeconomics: Hanming Fang
- Empirical Methods of Industrial Organization: Holger Sieg
- Industrial Organization of Health Care: Robert Town
- Industrial Organization: Jean-Francois Houde, Katja Seim
- Economics of Labor: Andrew Shephard
- Advanced Topics in Urban Economics: Gilles Duranton

References

- Aviv Nevo (Advisor)
  George A. Weiss and Lydia Bravo Weiss University Professor
  Wharton School and Department of Economics, University of Pennsylvania
  773 Jon M. Huntsman Hall, 3730 Walnut Street
  University of Pennsylvania, Philadelphia, PA 19104-6304
  E-mail: anevo@upenn.edu
  Office: +1 (215) 898-0232

- Katja Seim (Committee member)
  Associate Professor of Business Economics and Public Policy
  The Wharton School, University of Pennsylvania
  1458 Steinberg-Dietrich Hall, 3620 Locust Walk
  University of Pennsylvania, Philadelphia, PA 19104-6372
  E-mail: kseim@wharton.upenn.edu
  Office: +1 (215) 898-8213

- Eric T. Bradlow (Committee member)
  K.P. Chao Professor, Professor of Marketing, Statistics, Education and Economics
  The Wharton School, University of Pennsylvania
  761 Jon M. Huntsman Hall, 3730 Walnut Street
  University of Pennsylvania, Philadelphia, PA 19104-6304
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  Office: +1 (215) 898-8255

Research Abstracts

○ **Customer Learning and Revenue Maximizing Trial Design (Job market paper)**
Free trials are a common marketing strategy that information goods providers use to facilitate customer learning-by-using. I develop an empirical model of learning-by-using to evaluate the profitability of two widely used trial configurations: limited duration of free usage (i.e. "time-locked trial") and limited access to certain features (i.e. "feature-limited trial"). The model accounts for four factors that create trade-offs for the firm in designing trials: (1) the initial uncertainty around customer-product match value, (2) customer risk aversion, (3) speed of learning relative to the product life, and (4) learning spill-overs across different features of the product. I estimate the model using a novel data set of videogame users' play records. I find that a time-locked trial with 5 free sessions is the ideal design, which increases the average willingness to pay post-trial by 9.8%. The revenue implication depends on the rate of demand depreciation during the trial period. I also find that in this setting, providing a feature-limited trial is profitable only when combined with time limitations. My model provides demand predictions for each of the possible trial designs and will help firms design the optimal free trial.

○ **Campaign Finance in U.S. House Elections**
This paper structurally estimates a dynamic model of fund-raising, campaign spending, and accumulation of war chest with unobserved candidate quality. We present an identification strategy similar to the one developed in the context of production function estimation that allows us to recover the quality (vote-getting ability) of the candidates. In our counterfactual experiment, we consider the equilibrium effects of government subsidies to challengers. We find that the subsidies substantially crowd out the challenger's fund-raising and increase the incumbent's fund-raising. Analysis that ignores these equilibrium effects substantially overestimates the effect of the policy.

○ **Advertising Competition in a Mixed Oligopoly**
We investigate a mixed oligopoly with misleading advertising competition. We find that, a welfare maximizing public enterprise always engages in misleading advertising and that, an increase in the number of firms increases the profit and advertising level of each private firm.