

Dear students who consider me as your research advisor.

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My research: My research focuses on the economics of human resource allocation and applies to the market for leaders and its implication on an aggregate economy, where leaders can be entrepreneurs, managers, bureaucrats or politicians who make decisions in the reallocation and organization of resources. I emphasize the importance of an equilibrium model with heterogeneity. It covers the selected topics in such as corporate governance, political election, internal labor market, a job market, the higher education, a firm dynamics, inequality and aggregate productivity.

If you are interested in my research, see my research from

<http://www2.osipp.osaka-u.ac.jp/~takii/research.html>

The economics of human resource allocation: If you become my advisee, you are expected to attend the seminar: the economics of human resource allocation and the workshop on the economics of human resource allocation.

1) At the seminar: the economics of human resource allocation (<http://www2.osipp.osaka-u.ac.jp/~takii/EHRA.htm>), you will learn a part of the following theories in each year.

1. Basic Assignment Model
2. Frictional Assignment Model
3. Investment: Human Capital and Organization Capital
4. Search Model
5. Investment and Reallocation
6. Learning, Career Concern and Reassignment
7. Evaluation, Misallocation of Effort and Institution
8. Misallocation of Talent and Productivity
9. Assignment and Persistence of Inequality
10. Assignment and Happiness

2) At the workshop on the economics of human resource allocation (<https://sites.google.com/site/jinzaihaichinokeizaigaku/>), the participants must present their own paper or the recent theoretical or empirical papers related to the human resource allocation in several fields. Potential fields cover corporate governance, political

election, bureaucracy, internal and external labor market, school choice, and its impacts on the performance of firms, government policy, inequality and aggregate economy.

Basic literature for the economics of human resource allocation:

1. Theoretical Foundation of Human Resource Allocation

a. Static Model

1. Roth Alvin E., Oliveira Sotomayor (1992), Two-Sided Matching: A Study in Game-Theoretic Modeling and Analysis, Economic Society Monographs
2. Sattinger, Michael (1993), "Assignment Models of the Distribution of Earnings", Journal of Economic Literature 831-880, <http://www.jstor.org/stable/2728516>
3. 伊藤秀史 (2003) 契約の経済学 A Course in Contract Theory 有斐閣
4. Tirole, Jean (2006), Theory of Corporate Finance, Princeton

b. Dynamic Model

1. Ljungqvist and Sargent (2004), Chapter 6 Search, Matching and Unemployment and Chapter 25 Equilibrium Search and Matching, in Recursive Macroeconomic Theory, MIT press
2. Rogerson, Richard, Robert Shimer and Randall Wright (2005) " Search Theoretic Models of the Labor Market: A Survey," Journal of Economic Literature, 959-988 <http://home.uchicago.edu/shimer/wp/search-survey.pdf>.
3. Acemoglu, Daron and David Autor, "Lectures in Labor Economics:" (<http://economics.mit.edu/files/4689>)

2. Quantitative Methods for Equilibrium Models with Heterogeneity

a. Fact findings for “causal relationship”

1. Angrist, v and Jörn-Steffen Pischke (2009), Mostly Harmless Econometrics: An Empiricist’s Companion, Princeton University Press

b. Static Model

1. Train, Kenneth (2003), Discrete Choice Methods with Simulation, Cambridge University Press <http://eml.berkeley.edu/books/choice2.html>
2. Nevo, Aviv (2000), "A Practitioner's Guide to Estimation of Random-Coefficients Logit Models of Demand," Journal of Economics & Management Strategy, Volume 9, Number 4, Winter 513—548
3. 中嶋亮 (2005)、マッチングゲームの実証分析、三菱経済研究所

c. Dynamic Model

1. Kydland, Finn E. and Edward C. Prescott (1996), “The Computational

- Experiment: An Econometric Tool.” Journal of Economic Perspective, 69-85.
2. Adda and Cooper (2003), Dynamic Economics, MIT press
 3. Aguirregabiria, Victor and Pedro Mira (2010), "Dynamic Discrete Choice Structural Models: A Survey" Journal of Econometrics, Volume 156, Issue 1, May, 38-67.

Required Skills to Study Economics under My Supervision: Economics uses the mathematics as its language. Therefore, the minimum knowledge of mathematics is a requirement to understand modern economics. Moreover, as most of important research is done in English, you should be able to read English papers.

1) The Minimum Requirement

- a) **Basic Analysis and Linear Algebra:** As a graduate student, I assume that you must know basic analysis and linear algebra. Make sure that you know at least the following level of mathematics before starting our graduate program.
 - i) Alpha C Chiang, Fundamental Methods of Mathematical Economics :
<http://www.drchristiansalas.org.uk/businessandeconomics/economics/fundamentalmethods.pdf>
 - ii) 数学検定1級: <http://www.su-gaku.net/about/index.php>
- b) **The Minimum English Skill:** If you can read this web page, you don't need to worry about it.

2) **The requirement to pursue a doctoral degree:** You are required to study microeconomics, macroeconomics and econometrics in our program. If you wish to pursue a doctoral degree, you must have

- a) more than B at all suggested microeconomics, macroeconomics and econometrics courses
- b) more than A at the more than half of suggested microeconomics, macroeconomics and econometrics courses.

3) **Advanced Suggested Mathematics:** Although these are not required, the advanced knowledge of mathematics sometimes helps your research. The following books are

useful for developing your mathematical skills.

- i) Luenberger, David G. (1969), *Optimization by Vector Space Methods*, Wiley-Interscience
<http://www.bioen.utah.edu/wiki/images/4/44/OptimizationIntroduction.pdf>
- ii) DeGroot, Morris H. (1970), *Optimal Statistical Decisions*, New York, McGraw-Hill, Inc.
<http://www.amazon.com/Optimal-Statistical-Decisions-Morris-DeGroot/dp/047168029X>
- iii) Stokey, Nancy L. and Robert E. Lucas with Edward C. Prescott (1989), *Recursive Methods in Economic Dynamics*, Harvard University Press
<http://www.amazon.co.jp/Recursive-Methods-Economic-Dynamics-Stokey/dp/0674750969>
- iv) 小山昭雄 *経済数学教室 1-8巻+別巻* 岩波書店
<https://www.iwanami.co.jp/.BOOKS/02/0/028401+.html>

Recommended Books for Undergraduate Students: Although analytical skills are necessary for being an economist, it is not sufficient. As an undergraduate student, you can study and experience whatever you want, which will gradually develop a subject that you may want to pursue in your life. So the following list of books may not be suitable for you. But, just in case, I have learned a lot from the following non-technical books about economics.

猪木武徳 (1987) 「経済思想」 モダンエコノミクス

猪木武徳 (2001) 「自由と秩序」 中公叢書

猪木武徳 (2009) 「戦後世界経済史」 中公新書

堂目卓生 (2008) 「アダムスミス」 中公新書

斎藤誠 (2010) 「競争の作法」 一いかに働き、投資するか。ちくま新書

Milgrom, Paul and John Roberts (1992) *Economics, Organization & Management*, Prentice Hall (「組織の経済学」 NTT 出版)

Kroszner, Randall S. and Louis Putterman (1996), *The Economic Nature of The Firm: A Reader*, Cambridge

Redman, Deborah A. (1993), *Economics and the Philosophy of Science*, Oxford University Press (経済学と科学哲学, 文化書房博文社)