# Hitotsubashi University Department of Economics Labor Economics I Fall 2017

**Instructor:** Hiroaki Mori

**Lecture Time:** M,Th 8:45-10:30 AM

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**Office Hours:** M 13:00-15:00

Office: Faculty Building 2, Room 211

## **Course Description**

The objective of the course is to provide students with basic economic tools needed to understand and analyze the origins and extent of income inequality among individuals. As the first section of the labor economics sequence, this course mainly focuses on workers' labor supply behavior, lifecyle skill formation, and the pricing of skills in the labor market. Throughout this course, we will discuss the roles of economic theory and econometric methods in evaluating and designing various government policies that may alleviate inequality among individuals, such as income taxation, social insurance programs, education policies, and location-based development programs.

# Lecture Style

This course consists of 12 lectures, 2 assignments, and a final exam. Lectures will be given in English.

# **Prerequisites**

The prerequisites for this course are introductory microeconomics and introductory econometrics.

You are responsible for ensuring that you have successfully completed all course prerequisites. Lack of prerequisites may not be used as a basis for appeal. If you are found to be ineligible for a course, you may be removed from it at any time and you will receive no adjustment to your fees.

If you find that you do not have the course prerequisites, it is in your best interest to drop the course well before the end of the add/drop period. Your prompt attention to this matter will not only help protect your academic record, but will ensure that spaces become available for students who require the course for graduation.

## Registration

You are responsible for ensuring that you are registered in the correct courses. If you are not registered in this course, the Department will not release your marks until your registration is corrected. If you notice a problem, please contact the administration office right away.

#### Assessment

The course grade will be based on 2 assignments and a final exam. The distribution of the marks is as follows:

| Assessment      | Weight |
|-----------------|--------|
| Assignments (2) | 60%    |
| Final exam      | 40%    |

Assignments: Two assignments will be posted to the course website. Typically, students will be given two weeks to complete each assignment. Students are permitted to work in a group of up to two students and to submit a single copy of their solutions per group. Assignments are due at the start of the day's lecture. The deadline for each assignment is listed below:

| Assignment 1 | 10/16 |
|--------------|-------|
| 0            | 10/30 |

*Exams*: All exams are closed book. All electronic devices, except for a non-programmable calculator, will be prohibited during exams. Final exam date will be TBA.

**Policy Regarding Late/Missed Assignments**: Late assignments will be assessed a 10% penalty the first day, and not accepted subsequently. If a student fails to submit an assignment on time, and has a valid reason, it is their responsibility to contact the instructor and explain the reason. Proof supporting this reason may be requested by the instructor.

#### **Textbook**

# [1] Borjas, George J., Labor Economics, 6th Edition, 2013. [Text]

It is required that students have access to the textbook. The 7th edition, published in 2015, also works as a textbook. A copy of the textbook will be available in the library once the term begins. Please note that my lectures will not strictly follow the textbook: they will be mostly based on the references listed at the end of the syllabus.

#### Schedule

Please note that the following is a tentative schedule for the course. All changes in the schedule will be announced in advance. Students are responsible for learning about these changes.

| T (D ()          | m ·  |
|------------------|--|
| Lecture (Date)   | Topic  |
| 01 (09/21)       | Introduction                                   |
| 02 (09/25)       | Polarization and income inequality             |
| 03 (09/28)       | Lifecycle skill formation                      |
| 04 (10/02)       | Labor supply and optimal income taxation       |
| 05 (10/05)       | Econometrics part 1: OLS estimation            |
| 06 (10/09)       | Econometrics part 2: Difference-in-differences |
| 07 (10/12)       | Family policies and gender gaps                |
| 08 (10/16)       | Competitive labor market equilibrium           |
| 09 (10/19)       | Taste-based wage differentials                 |
| 10 (10/23)       | Equilibrium job search models                  |
| 11 (10/26)       | Optimal unemployment insurance                 |
| 12 (10/30)       | Local labor markets                            |
| 13 (11/02)       | Review for final                               |
| <u>— (11/06)</u> | Final exam                                     |

# **Topics**

- 1. Introduction
  - Trends in income inequality in the U.S. and Japan
  - Family background and skill gaps among children
- 2. Polarization and income inequality
  - Job polarization and jobless recoveries in the U.S.
  - Supply of college graduates in the U.S. and Japan
  - CES production function
  - Canonical model of college wage premium
- 3. Lifecycle skill formation
  - Sensitive periods and dynamic complementarity of skill formation
  - Non-cognitive skills
  - Evidence against the ability correlation hypothesis
  - Early childhood interventions: Perry preschool program and Abecedarian project
- 4. Labor supply and optimal income taxation
  - Income effect and substitution effect
  - Reservation wages
  - Laffer curve
  - Welfare vs. workfare

- Earned income tax credit
- 5. OLS estimation
  - OLS estimators
  - *t*-test
  - Endogeneity problems
- 6. Difference-in-differences
  - Treatment group and control group
  - Testing the common trend assumption
- 7. Family policies and gender gaps
  - Gender employment gaps
  - Influences of population aging
  - Parental leave policies and childcare policies
  - Gender wage gaps
  - Selection bias
  - Gender gaps in college education
  - Gender gaps in skill usages
- 8. Competitive labor market equilibrium
  - Efficiency of a competitive equilibrium
  - Incidence analysis
  - Estimating demand and supply with exclusion restrictions
- 9. Taste-based wage differentials
  - Compensating differentials
  - Hedonic wage regression
  - Value of a statistical life (VSL)
  - Becker's model of taste-based discrimination
  - Testing the Becker's model
  - Limitations of audit studies
- 10. Equilibrium job search models
  - Unemployment rate
  - Search frictions and search externalities
  - The DMP model

- Beveridge curve
- UI benefit cut and labor market outcomes

## 11. Optimal unemployment insurance

- Consumption smoothing benefit (cash-on-hand effect)
- Moral hazard effects (substitution effects)
- Estimation of cash-on-hand effect using severance pay
- Spike of unemployment exits around the time of benefit exhaustion
- Age-dependent UI design

#### 12. Local labor markets

- Persistence of geographical inequality
- Equalizing forces of worker mobility
- Agglomeration hypothesis
- Location-based policies

#### References

#### Polarization and Income Inequality

- \* Acemoglu and Autor (2011) HoLE. Skills, Tasks and Technologies: Implications for Employment and Earnings
- \* Autor and Dorn (2013) AER. The Growth of Low-Skill Service Jobs and the Polarization of the US Labor Market
- Carneiro and Lee (2011) AER. Trends in Quality-Adjusted Skill Premia in the United States, 1960-2000
- \* Jaimovich and Siu (2012). The Trend is the Cycle: Job Polarization and Jobless Recoveries
- \* Kawaguchi and Mori (2016) EER. Why Has Wage Inequality Evolved so Differently between Japan and the US? The Role of the Supply of College-Educated Workers
- \* Moriguchi and Saez (2008) ReStat. The Evolution of Income Concentration in Japan, 1886-2005: Evidence from Income Tax Statistics

#### **Lifecycle Skill Formation**

- \* Caucutt et al. (2016) SJE. Correlation, Consumption, Confusion, or Constraints: Why Do Poor Children Perform so Poorly?
- \* Cunha et al. (2006) HoEE. Interpreting the Evidence on Life Cycle Skill Formation
- \* Lochner and Monge-Naranjo (2012) ARE. Credit Constraints in Education
- Pavan (2017) JHR. On the Production of Skills and the Birth Order Effect
- \* Kuruscu (2006) AER. Training and Lifetime Income
- \* Bowlus and Robinson (2012) AER. Human Capital Prices, Productivity, and Growth
- \* Rubinstein and Weiss (2006) HoEE. Post Schooling Wage Growth: Investment, Search and Learning

## **Labor Supply and Optimal Income Taxation**

- Bianchi et al. (2001) AER. Iceland's Natural Experiment in Supply-Side Economics.
- Blundell et al. (1998) EMA. Estimating Labor Supply Responses Using Tax Reforms.
- Blundell (2005) LE. Earned Income Tax Credit Policies: Impact and Optimality
- Blundell et al. (2007) HoEX. Labor Supply Models: Unobserved Heterogeneity, Nonparticipation and Dynamics

- Eissa and Liebman (1996) QJE. Labor Supply Response to the Earned Income Tax Credit.
- Imbens et al. (2001) AER. Estimating the Effect of Unearned Income on Labor Earnings, Savings, and Consumption: Evidence from a Survey of Lottery Players.
- Piketty and Saez (2013) HoPE. Optimal Labor Income Taxation

#### **Econometric Methods**

- Blundell and Dias (2007) JHR. Alternative Approaches to Evaluation in Empirical Microeconomics
- Stock and Watson (2011) Introduction to Econometrics, 3rd Edition

### Family Policies and Gender Gaps

- \* Kawaguchi and Mori (2017) IZA WoL. The Labor Market in Japan, 2000-2016.
- \* Yamaguchi (2016) JER. Family Policies and Female Employment in Japan
- \* Olivetti and Petrongolo (2016) ARE. The Evolution of Gender Gaps in Industrialized Countries
- \* Olivetti and Petrongolo (2017) JEP. The Economic Consequences of Family Policies: Lessons from a Century of Legislation in High-income Countries
- \* Olivetti and Petrongolo (2008) JoLE. Unequal Pay or Unequal Employment? A Cross-Country Analysis of Gender Gaps
- Abe (2013) JWE. Regional Variations in Labor Force Behavior of Women in Japan.
- Heckman (1979) EMA. Sample Selection Bias as a Specification Error
- \* Manski (1989) JHR. Anatomy of the Selection Problem
- Onozuka (2016) JJIE. The Gender Wage Gap and Sample Selection in Japan

#### **Competitive Labor Market Equilibrium**

- Acemoglu et al. (2004) JPE. Women, War, and Wages: The Effect of Female Labor Supply on the Wage Structure at Midcentury
- \* Carrington (1996) JPE. The Alaskan Labor Market during the Pipeline Era
- Kawaguchi et al. (2014) JLawE. Incidence of Strict Quality Standards: Protection of Consumers or Windfall for Professionals?
- \* Summers (1989) AERPP. Some Simple Economics of Mandated Benefits
- Gruber (1994) AER. The Incidence of Mandated Maternity Benefits

#### **Taste-based Wage Differentials**

- Goldin and Rouse (2000) AER. Orchestrating Impartiality: The Impact of "Blind" Auditions on Female Musicians
- Bertrand and Mullainathan (2004) AER. Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination
- \* Heckman (1998) JEP. Detecting Discrimination
- \* Charles and Guryan (2008) JPE. Prejudice and Wages: An Empirical Assessment of Becker's The Economics of Discrimination
- Fryer Jr. (2012) HoLE. Racial Inequality in the 21st Century: the Declining Significance of Discrimination
- Rosen (1986) HoLE. The Theory of Equalizing Differences
- Ashenfelter and Greenstone (2004) JPE. Using Mandated Speed Limits to Measure the Value of a Statistical Life
- \* Kawaguchi and Yufutake (2017) JUE. Estimating the Residential Land Damage of the Fukushima Nuclear Accident

#### **Equilibrium Job Search Models**

- \* Williamson (2017). Macroeconomics, Chapter 6.
- Rogerson et al. (2005) JEL. Search-Theoretic Models of the Labor Market: A Survey
- Hagedorn and Manovskii (2008) AER. The Cyclical Behavior of Equilibrium Unemployment and Vacancies Revisited
- Hagedorn et al. (2013). Unemployment Benefits and Unemployment in the Great Recession: The Role of Macro Effects

#### **Optimal Unemployment Insurance**

- Card et al. (2007) AERPP. The Spike at Benefit Exhaustion: Leaving the Unemployment System or Starting a New Job?
- Card et al. (2007) QJE. Cash-on-Hand and Competing Models of Intertemporal Behavior: New Evidence from the Labor Market
- Shavell and Weiss (1979) JPE. The Optimal Payment of Unemployment Insurance Benefits over Time
- Hopenhayn and Nicolini (1999) JPE. Optimal Unemployment Insurance

- \* Chetty (2008) JPE. Moral Hazard versus Liquidity and Optimal Unemployment Insurance
- \* Chetty (2009) ARE. Sufficient Statistics for Welfare Analysis: A Bridge Between Structural and Reduced-Form Methods
- \* Michelacci and Ruffo (2015) AER. Optimal Life Cycle Unemployment Insurance

#### **Local Labor Markets**

- \* Moretti (2010) HoLE. Local Labor Markets
- \* Baum-Snow and Pavan (2013) ReStat. Inequality and City Size
- \* Chetty et al. (2014) QJE. Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States
- Kline and Moretti (2014). People, Places, and Public Policy: Some Simple Welfare Economics of Local Economic Development Programs