EC 121b: Theory of Value

Winter 2018

Instructor: Federico Echenique
Email: `fede@hss.caltech.edu`
Lectures: Mondays, Wednesdays and Fridays, 2-2:55pm,
228 Baxter.
Course webpage: `www.hss.caltech.edu/~fede/ec121/`

Texts

"Microeconomic Theory" by Mas-Colell, Whinston & Green is the required text.

Course evaluation

There will be (roughly) bi-weekly homework assignments and a final exam. I would like you to work in groups for the homework assignments, so form groups of three or four students for the duration of the course. To make the most of the course, I suggest that you work on the problems on your own at first, then meet to discuss the problems with your groupmates. The homework counts for 40% of the grade and the final for 60%.

Syllabus

1. **General Equilibrium in the Edgeworth Box.** Walrasian equilibrium and the welfare theorems. The core and the cooperative foundation of walrasian equilibrium. Mas-Colell, Whinston & Green (MWG) 15.B. and 18.B.

2. **Equilibrium and Welfare.** The welfare theorems. The role of convexity of preferences and technologies. Aggregation and Welfare (Scitovsky contours and Samuelsonian representative consumer). The Kaldor criterion. MWG Ch. 16

3. **Existence of competitive equilibria.** Existence by the excess demand approach. Uniqueness of Walrasian equilibrium. MWG Ch. 17

4. AGGREGATION. Aggregation problems and the representative agent in general-equilibrium models. Observable consequences of equilibrium: the Sonnenschein-Mantel-Debreu Theorem. MWG Ch. 4, MWG Ch. 17.

5. PARTIAL EQUILIBRIUM. Equilibrium and welfare under quasilinear preferences. Compensating and equivalent variations. Consumer surplus. MWG Ch. 10 and 15.E

6. APPLICATIONS TO FINANCE. General equilibrium under uncertainty. No-arbitrage asset pricing. Complete markets. Consumption CAPM. The Lucas tree model. MWG Ch. 19

7. APPLICATIONS TO INTERNATIONAL TRADE. The two-sector model. Optimality of international trade: the argument for free trade. Factor price equalization. Rybcszynski's Theorem. MWG Ch. 15D.

8. APPLICATIONS TO MACROECONOMICS. Samuelson's model of overlapping generations. Monetary Equilibrium. Optimality: Failure of the first welfare theorem, and the role of social security. MWG Ch. 20.

9. WELFARE ECONOMICS. Social choice and welfare. Arrow's Theorem. MWG Ch. 21

10. TAKING STOCK: THE THEORY OF VALUE. What is economic value? Why are prices what they are? The labor theory and the neoclassical theory of value.