Microeconomics I: General Equilibrium
PhD in Economics and Finance, Bocconi University

Fall 2022

Syllabus

1. Mathematical Preliminaries
   Concavity and differentiability; Extreme value theorem; Kuhn-Tucker theorem; Implicit function theorem; Kakutani fixed point theorem; Farkas lemma.

2. Theory of the Neoclassical Firm
   Existence, Uniqueness, Characaterization, Sensitivity of optimal solution.

3. Theory of the Household
   Existence, Uniqueness, Characaterization, Sensitivity of optimal solution.

4. General Equilibrium: Definition and Existence
   Walrasian allocations; Smooth equilibrium equations; Existence theorem.

5. General Equilibrium: Determinacy and Optimality
   Transversality theorem; Finite local uniqueness; Basic welfare theorems.

6. Financial Equilibrium
   Contingent commodities markets; Financial equilibrium; No arbitrage theorem; Arrow equivalence theorem; Equivalent asset structures.

7. Further Topics
   Basic welfare theorems in basic model; Market imperfections.