ARE 202 – Applied Microeconomics
Welfare: Tools and Applications

Spring 2018 (first half)

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Intro

• Course outline

• Requirements
Goal of this course

• Reconcile you with Micro theory

• Provide various examples to show how this could be useful

• Modelling tips and recommendations

• How to use empirical estimates to make welfare statements and examine counterfactuals

• Cover a couple of recent papers as examples

• Help you get prepared for field courses

Course outline

Part 1: Consumer theory and application, welfare analysis
The demand side is present in almost all fields of economics. It is key to evaluate welfare implications of changes in policy, experiments, etc.
  – Example of demand systems, price effect and income effects
  – Practical applications of revealed preferences
  – Tools to measure welfare, and examples

Part 2: General equilibrium: Production, Factors, Trade…
Goal: combine with production side, general equilibrium analysis
  – Production, factors, costs
  – Trade and comparative advantage
  – Factor markets in open economy
  – Taxation and theory of second best
Course outline in more details

1) Consumer theory
   - Intro: bridge between utility and demand
   - Examples, more on price and wealth effects, non-homotheticity
   - Duality, Hicks, Expenditure function
   - Aggregation, discrete-choice models

2) Applications of revealed preferences
   - Implications for indifference curves, deadweight loss, gains from trade, etc.

3) Welfare evaluation
   - Equivalent and compensating variations
   - Consumer surplus
   - Price indexes

4) Production and industry equilibrium
   - Examples of production functions
   - Pricing: simple cases (monopoly, monopolistic competition)
   - Factor markets
   - Industry equilibrium with free entry

5) Factors of production, trade and general equilibrium
   - Notion of comparative advantage,
   - Aggregate gains from trade, Terms of trade
   - Unequal gains from trade, Dutch disease

6) Taxation and theory of second best
   - DWL, Optimal taxation
   - Taxes and tariffs in general equilibrium
   - Theory of second best: several examples
Books

I will use a few chapters from two books or more:

• MasCollel, Whinston and Green 1996, ch. 2 to 3, 15 to 17
  “Microeconomic Theory”

• Varian 1993, “Microeconomic Analysis”

• Feenstra 2003, chapters 1, 2, 5
  “Advanced International Trade: Theory and Evidence”

Articles

Several recent articles to illustrate how we can use what you learnt:

• Examples of utility functions from recent articles (e.g. Comin et al 16)

• Nakamura, Steinsson and Liu (2016):
  Retrieving real income from consumption patterns

• Atkin, Faber and Gonzagez-Navarro (2017):
  How to quantify welfare gains from foreign retail in Mexico

• Cohen, Hahn, Hall, Levitt and Metcalfe (2016):
  PS4: Estimating demand curves and consumer surplus for Uber

• Costinot and Donaldson (2016):
  Gains from market integration across US counties, 1880-1997

• Copeland & Taylor (2004): about Trade and the environment, etc.
Course requirements?

Grading weights:

• In-class exam (70%)

• Six problem sets (20%)

• Participation and comments on articles (10%)

Problem sets

Due (almost) every Wednesday

1. Additive and implicitly-additive utility
2. Choke prices
3. Deadweight loss and consumer surplus
4. Returns to factors
5. Krugman model
I need feedback!

- Participate in class: this is the best way for me to check what you understand, what you don’t understand

- Whenever you feel like, please tell me
  - what you like / don’t really like
  - whether I should go faster/slower
  - whether you have difficulties with the comments, or with the math, the accent, etc.

- Please come to my office at least once (and before it’s too late, if you have any issue)

- Office 301 (Giannini): best to email before we meet.