

Midterm Summary

ECON 1820 Spring 2015
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Topics we Have Covered

- Utility Maximization
 - What do we mean by a representation theorem?
- Bounded Rationality
 - Search and satisficing
 - Rational Inattention
 - Level K thinking
- Temptation and Self Control
 - Gul and Pesendorfer Model
 - Sophistication
 - Quasi-Hyperbolic Discounting

What do you Need to Know? – Utility Maximization

- Key points
 - What is the model of utility maximization?
 - Why is testing utility maximization difficult?
 - What is a representation theorem, and why does it help with this problem?
- Definitions
 - Choice correspondence and choice function
 - Preference relations and their properties
 - Properties alpha and beta
 - Utility representation
 - Commodity bundles and budget sets
 - Local non-satiation
 - Revealed preference and GARP
- Theorems
 - Relationship between alpha and beta and preferences
 - Relationship between preferences and utility
 - Relationship between GARP and utility (Afriat's theorem)
 - Uniqueness results

What do you Need to Know? – Bounded Rationality 1

- Key points
 - Utility maximization may fail if information is not free
 - People may not 'choose the best'
 - How can we introduce costs of information into models of choice?
 - What are the testable implications?
- Definitions
 - Satisficing model
 - Choice process data
 - Information Structure
 - Entropy
- Theorems
 - Satisficing as optimal search
 - The value of an information structure
 - Rational Inattention in a simple 2 state 2 act case

What do you Need to Know? – Bounded Rationality 2

- Key points
 - Nash Equilibrium requires a high degree of rationality
 - How might less rational players play
- Definitions
 - Nash Equilibrium
 - Best response
 - Level K thinking

What do you Need to Know? – Temptation and Self Control

- Key points
 - Problems of temptation and self control seem ubiquitous in everyday choice
 - How can we behaviorally detect such problems?
 - Preference for commitment
 - Preference reversals in discounting
- Definitions
 - Preferences over menus
 - Preference for commitment
 - The Gul Pesendorfer model
 - Set Betweenness
 - Sophistication
 - Preference reversal
 - The exponential discounting model
 - The beta delta model
- Theorems
 - Gul Pesendorfer implies set betweenness
 - Exponential discounting implies no preference reversals and no preference for commitment
 - Beta delta discounting allows for preference reversals and preference for commitment
 - Preference for flexibility