

# Bounded Rationality

## Lecture 1

### Three Stories

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# Outline

## 1 Three Motivating Stories

## Story 1. The Law of Demand

Gary Becker (1962), “Irrational Behavior and Economic Theory”,  
*Journal of Political Economy*, 70(1), pp. 1-13.

- Lesson 1:** Very different behaviors can be investigated and modeled (optimising, impulsive, inertian)
- Lesson 2:** Individual irrationality can be consistent with aggregate rationality (micro  $\neq$  macro).
- Lesson 3:** Some aggregate results hold simply due to shifts in opportunity sets

## Story 2. Near-Rational Behavior

George Akerlof, Janet Yellen (1985), “Can Small Deviations from Rationality Make Significant Differences to Economic Equilibria?”, *American Economic Review*, 75(4), pp. 708-720.

- Lesson 1:** Second-order deviations from rationality (“near-rationality” due to inertia) may cause first-order deviations in economic consequences
- Lesson 2:** Such situation is rather common phenomenon than exception (envelope theorem)
- Lesson 3:** The result holds in more general (than monopoly) settings: even small amount of near-rational behavior is sufficient.

## Story 3. Emerging Property

Thomas Schelling (1969), “Models of Segregation”, *American Economic Review*, 59(2), pp. 488-493.

- Lesson 1:** Micro-motives can lead to the unexpected and unintended macro-consequences (macro  $\neq$  micro)
- Lesson 2:** Behavior governed by local and random rules may lead to a well-defined, non-trivial outcomes
- Lesson 3:** There are models with multiple equilibria: how can we predict which equilibrium will be realised?